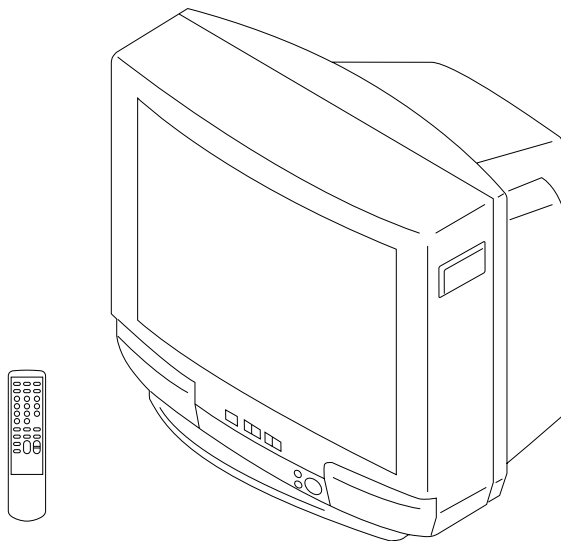


SERVICE MANUAL

BG-1S CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
<i>KV-T21MN8</i>	<i>RM-870</i>	<i>Hong Kong</i>	<i>SCC-J16G-A</i>
<i>KV-T21MN81</i>	<i>RM-870</i>	<i>GE</i>	<i>SCC-J40V-A</i>

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
--------------	------------------	--------------	--------------------



TRINITRON® COLOR TV
SONY®

SPECIFICATIONS

		Note
Power requirements	110-240 V AC, 50/60 Hz	
Power consumption (W)	Indicated on the rear of the TV	
Television system	B/G, I, D/K, M	
Color system	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58	
Stereo system	Nicam Stereo B/G, I; A2 Stereo (German) B/G	
Teletext language	English, German, Swedish, Italian, French, Spanish	KV-T21MN81 only
Channel coverage		
B/G	VHF: E2 to E12 / UHF: E21 to E69 / CATV: S01 to S03, S1 to S41	
I	UHF: B21 to B68 / CATV: S01 to S03, S1 to S41	
D/K	VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 / CATV: S01 to S03, S1 to S41, Z1 to Z39	
M	VHF: A2 to A13 / UHF: A14 to A79 / CATV: A-8 to A-2, A to W+ 4, W+ 6 to W+ 84	
Audio output (speaker)	3W × 2	
Inputs	Antenna: 75 ohms	
	VIDEO IN jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500 mVrms, high impedance	
Outputs	Headphone jack: minijack	
	MONITOR OUT jacks: phono jacks Video: 1 Vp-p, 75 ohms Audio: 500 mVrms	
Picture tube	21 in.	
Tube size (cm)	54	Measured diagonally
Screen size (cm)	51	Measured diagonally
Dimensions (w/h/d, mm)	527 × 464 × 471	
Mass (kg)	22	

Design and specifications are subject to change without notice.

CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

SAFETY-RELATED COMPONENT WARNING!!


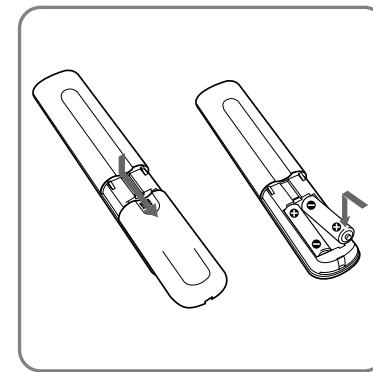
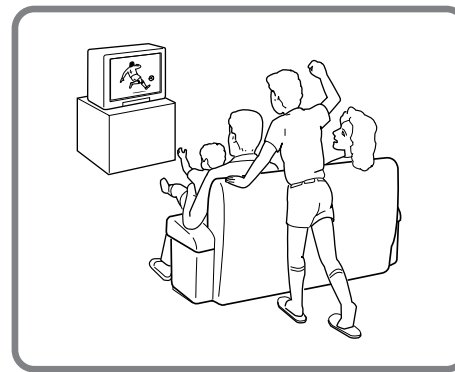
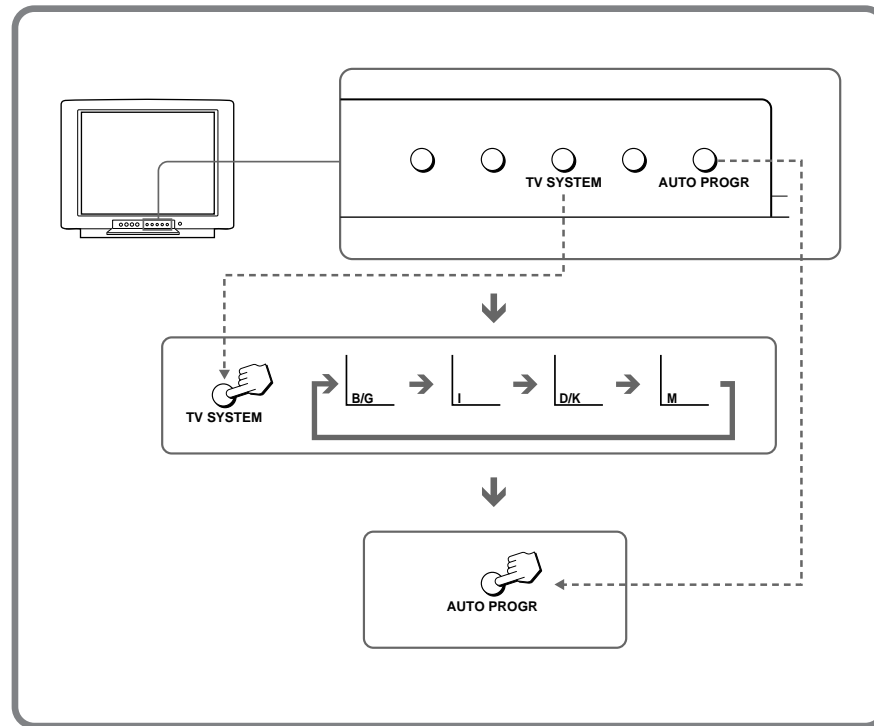
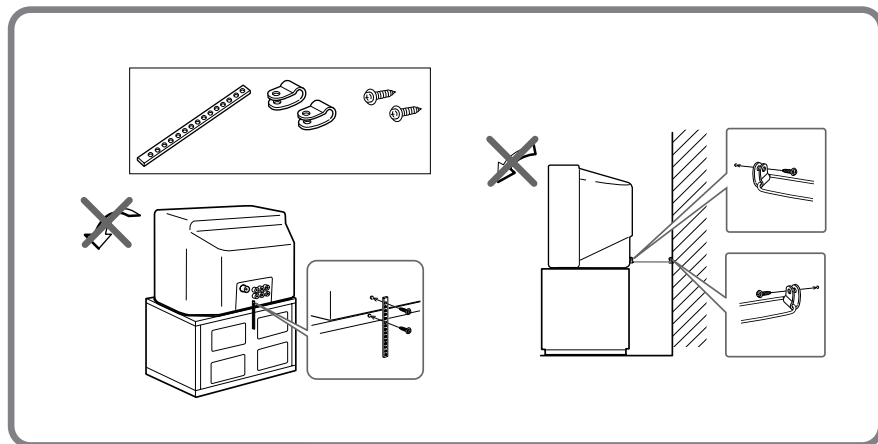
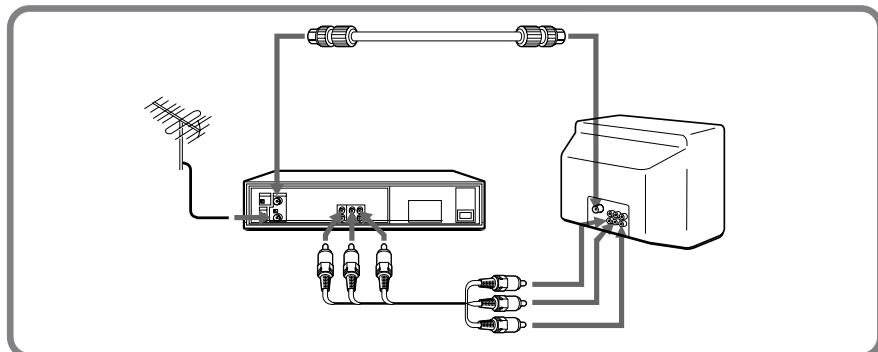
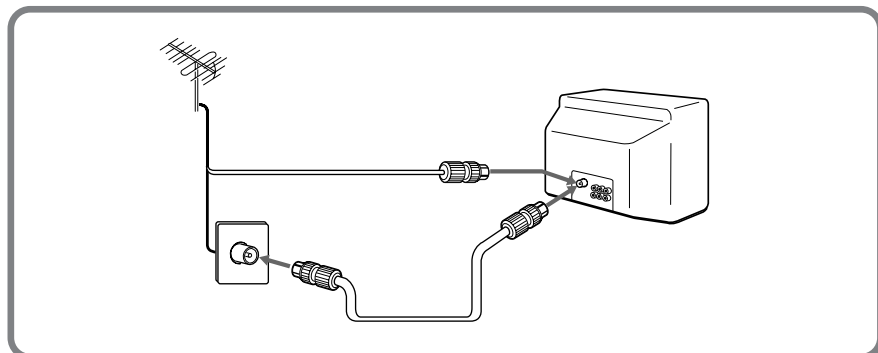
COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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SECTION 1 GENERAL

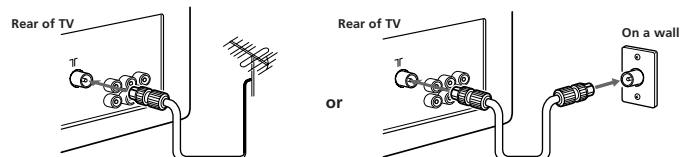
The operating instructions mentioned here are partial abstracts from the Operating Instructions Manual. The page numbers of the Operating Instruction Manual remain as in this manual.



Connections

Connecting a VHF antenna or a combination VHF/UHF antenna — 75-ohm coaxial cable (round)

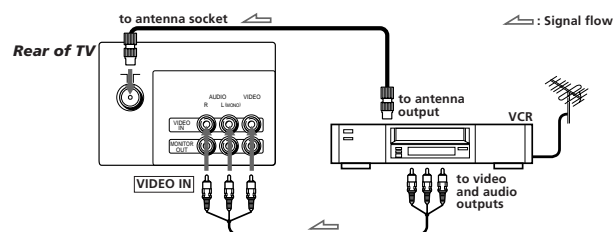
Attach an optional IEC antenna connector to the 75-ohm coaxial cable.
Plug the connector into the Π (antenna) socket at the rear of the TV.



Connecting optional equipment

You can connect optional audio/video equipment to your TV such as a VCR, multi disc player, camcorder, video game or stereo system.

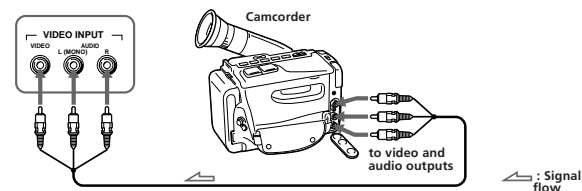
Connecting video equipment using video input jacks



When connecting a monaural VCR

Connect the yellow plug to VIDEO and the black plug to AUDIO-L (MONO).

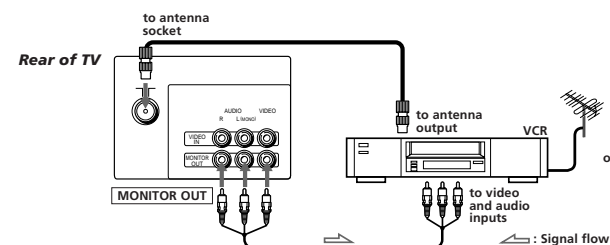
Front of TV



When using the video input jacks

Do not connect video equipment to the video input jacks at the front and the rear of your TV simultaneously; otherwise the picture will not be displayed properly on the screen.

Connecting audio/video equipment using MONITOR OUT jacks



When recording through the MONITOR OUT jacks

If you change the channel or video input while recording with a VCR, the channel or video input you are recording also will be changed.

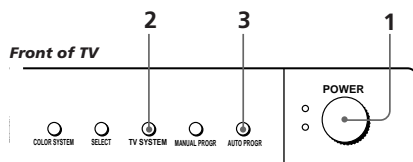


EN

Presetting channels

Presetting channels automatically

You can preset up to 80 TV channels in numerical sequence from program position 1.

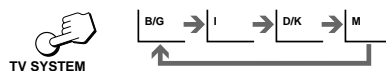


1 Press POWER.

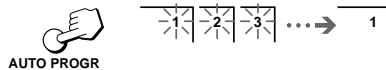


When the TV is in standby mode after pressing POWER, press POWER on the remote commander.

2 Press TV SYSTEM until your local TV system appears.



3 Press AUTO PROGR.



To start presetting channels automatically from the specified program position

- 1 Press MANUAL PROGR.
- 2 Press TV SYSTEM to select your local TV system.
- 3 Press PROGR +/- to select the program position.
- 4 Press AUTO PROGR.

Presetting channels manually

To change the channel for a particular program position or to receive a channel with a weak signal, preset the channel manually.

1 Press MANUAL PROGR.

2 Press PROGR +/- until the required program position appears on the screen.

3 Press TV SYSTEM until your local TV system appears.

4 Press VOLUME +/- on the TV until the required channel picture appears on the screen.

5 Press MANUAL PROGR.

If the TV system is not properly selected

The color of the picture may be poor and/or the sound may be noisy. In this case, select the appropriate TV system.

- 1 Press PROGR +/- to select the program position.
- 2 Press TV SYSTEM until the picture and sound become normal.

Notes

- If you do not know your local TV system, consult your nearest authorized service center or dealer.
- The setting of the TV SYSTEM is memorized for each program position.

Disabling program positions

By disabling unused or unwanted program positions, you can skip those positions when you press PROGR +/-.

1 Press PROGR +/- until the unused or unwanted program position appears on the screen.

2 Press MANUAL PROGR.

3 Press PIC MODE on the remote commander.

4 Press MANUAL PROGR.

To cancel the skip setting

Preset the channel manually or automatically again.

Operations

Watching the TV

1 Press POWER to turn the TV on.

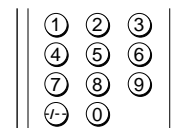


When the TV is in standby mode after pressing POWER, press POWER on the remote commander.

2 Select the TV channel you want to watch.

To select a channel directly

Press a number button.



To select a two-digit channel, press "-/-" before the number buttons.

For example: to select channel 25, press "-/-," and then "2" and "5."



To scan through channels

Press PROGR +/- until the channel you want appears.

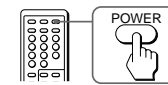


3 Press VOL +/- to adjust the volume.



Switching off the TV

To switch off the TV temporarily, press POWER on the remote commander.



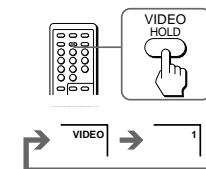
To switch off the TV completely, press POWER on the TV.

If the power on the TV is turned off in standby mode, the STANDBY indicator may remain alight for a while.

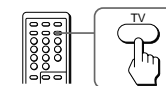


Watching the video input

Press VIDEO/HOLD.

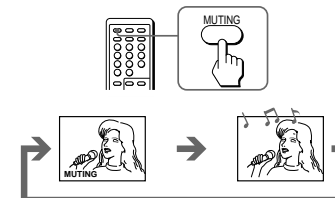


To watch TV, press TV.



Muting the sound

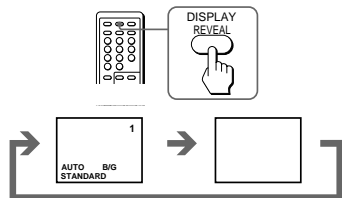
Press MUTING.



Displaying on-screen information

Press DISPLAY/REVEAL.

The program position, local system, and TV settings are displayed on the screen.

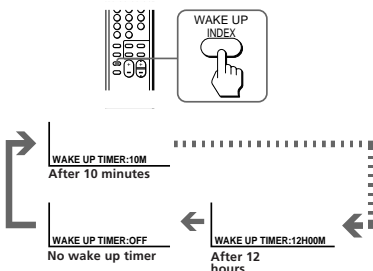


Setting the Wake Up Timer

You can set the TV to turn on automatically after the period of time you want.

1 Press WAKE UP/INDEX repeatedly to set the timer.

The on-screen display appears and the WAKE UP/STEREO indicator lights up.



2 If you want a particular TV program or video input to be displayed using the Wake Up Timer, select the TV program or video mode.

3 Press POWER on the remote commander or set the Sleep Timer to turn off the TV in standby mode.

To cancel the Wake Up Timer, press WAKE UP/INDEX repeatedly until "WAKE UP TIMER: OFF" appears, or turn off the main power of the TV.

Notes

- The Wake Up Timer starts immediately after the on-screen display disappears.
- The last TV program position or video mode just before the TV

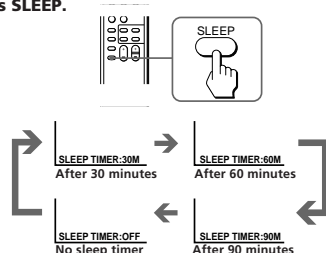
turns into standby mode will appear when the TV is turned on using the Wake Up Timer.

- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up Timer, the TV automatically turns into standby mode. When you want to continue watching the TV, press any button or control on the TV or remote commander.

Setting the Sleep Timer

You can set the TV to turn off automatically after the period of time you want.

Press SLEEP.



To cancel the Sleep Timer, press SLEEP repeatedly until "SLEEP TIMER: OFF" appears, or turn the TV off.

Changing the on-screen display language

If you prefer Chinese to English, you can change the on-screen display language. You can use buttons on the remote commander or the TV.

1 Press SELECT until the screen appears as follow:



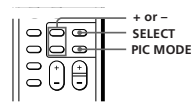
2 Press + or - to select "///".



Note

- You can also use VOLUME +/- on the TV to select the on-screen display language.

Adjusting the picture and sound

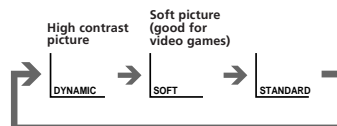


Selecting the picture mode

Press PIC MODE until the mode you want appears.



Each time you press PIC MODE, the screen changes as follows:



Note

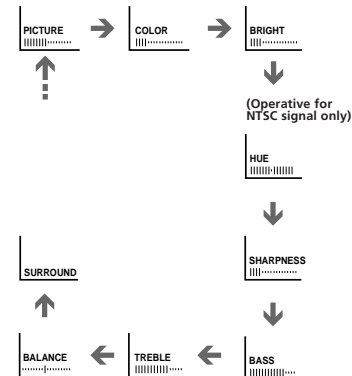
- If you change the picture mode after the following adjustments, the adjustment changes in accordance with the picture mode.

Adjusting the picture and sound settings

1 Press SELECT until the item you want to adjust appears.



Each time you press SELECT, the screen changes as follows:



2 Press + or - to adjust the item.



3 To adjust other items, repeat steps 1 and 2.

Note

- You can also use VOLUME +/- on the TV to adjust the picture and sound settings.

If the color of the picture is abnormal

When receiving programs through the ㊦ terminal: Press TV SYSTEM or COLOR SYSTEM or adjust the color setting until the color becomes normal.

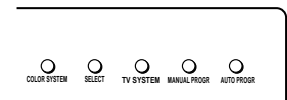
Note

- Normally set COLOR SYSTEM to AUTO.

If the sound is distorted or noisy

When receiving programs through the ㊦ terminal: Press TV SYSTEM until the sound becomes clear.

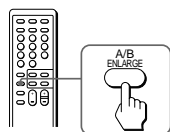
Front of TV



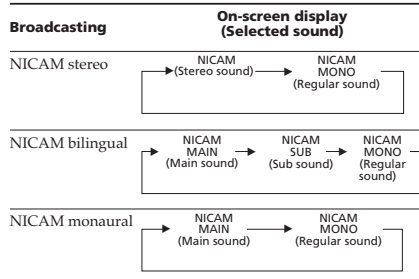
Selecting a stereo or bilingual program

Press **A/B/ENLARGE** repeatedly until you receive the sound you want.

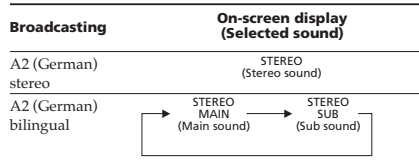
The on-screen display changes corresponding to the selected sound and the WAKE UP/STEREO indicator also lights up.



When receiving a NICAM program



When receiving a A2 (German) program



Receiving area for NICAM and A2 (German) programs

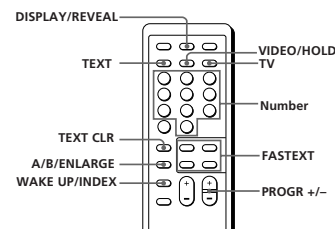
System	Receiving area
NICAM	Hong Kong, Singapore, New Zealand, etc.
A2 (German)	Australia, Malaysia, Thailand, etc.

Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy, select “regular sound.” The sound becomes monaural, however, the noise will be reduced.

Viewing Teletext

■ KV-T21MN81 only



Displaying Teletext

- 1 Select a TV channel which carries the Teletext broadcast you want to watch.
- 2 Press **TEXT** to display the Teletext. A Teletext page is displayed (normally the index page). If there is no Teletext broadcast, 100 is displayed at the top left corner of the screen.

To cancel the Teletext display, press **TV**.

Superimposing a Teletext page on the TV picture

Press **TEXT**.

Each time you press **TEXT**, the screen changes as follows:



Checking the contents of a Teletext service (INDEX)

Press **WAKE UP/INDEX** to display an overview of the Teletext contents and page numbers.

Using FASTEXT

This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT page is broadcasted, a color-coded menu appears at the bottom of the screen. The colors of the menu correspond to the RED, GREEN, YELLOW, and CYAN buttons on the remote commander.

Press the color button which corresponds to the color-coded menu.

The page is displayed after a few seconds.

Selecting a Teletext page

To input the three-digit page number of the Teletext page, press the number buttons.

If you make a mistake, key in the correct page number again.

To access the next or previous page, press **PROGR +/-**.

Holding a Teletext page (subpage)

Press **VIDEO/HOLD**.

The HOLD symbol “Ⓜ” is displayed at the top left corner of the screen.

To resume normal Teletext operation, press **VIDEO/HOLD** again or **TEXT**.

Revealing concealed information

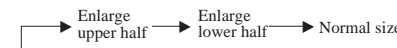
Press **DISPLAY/REVEAL**.

To conceal the information, press **DISPLAY/REVEAL** again.

Enlarging the Teletext display

Press **A/B/ENLARGE**.

Each time you press **A/B/ENLARGE**, the Teletext display changes as follows:



Waiting for a Teletext page while watching a TV program (TEXT CLEAR)

- 1 Key in the page number of the Teletext that you want to refer, then press **TEXT CLR**.
- 2 When the page number is displayed on the screen, press **TEXT** to switch the Teletext on.

Troubleshooting

If you have any problems, read this manual again and check the countermeasure for each of the symptoms listed below.

If the problem persists, contact your nearest authorized service center or dealer.

Snowy picture Noisy sound



- ➔ Check the antenna.
- ➔ Check the antenna connection on the TV and on the wall.
- ➔ Check the TV SYSTEM setting.

Dotted lines or stripes



- ➔ This may be caused by local interference (e.g. cars, neon signs, hair dryers, etc.). Adjust the antenna for minimum interference.

Double images or "ghosts"

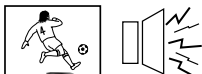


- ➔ This may be caused by reflections from nearby mountains or buildings. A highly directional antenna may improve the picture.

Notes

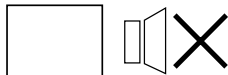
- When you switch on the TV, you may hear the "boon" sound that is caused by the demagnetization of the TV. This does not indicate a malfunction.
- The picture color may become abnormal if you change the direction of your TV. To obtain the normal picture color, press POWER on the TV to switch off the TV for five minutes and then switch it on again.
- Design and specifications are subject to change without notice.

Good picture Noisy sound



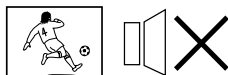
- ➔ Check the TV SYSTEM setting.

No picture No sound



- ➔ Press POWER.
- ➔ Check the antenna connection.
- ➔ Check the VCR connections.
- ➔ Check the power cord connection.
- ➔ Check the standby mode.

Good picture No sound



- ➔ Press VOLUME +.
- ➔ Press MUTE.
- ➔ Press A/B/ENLARGE.

No color



- ➔ Adjust the COLOR level in the on-screen display.
- ➔ Check the COLOR SYSTEM setting.

TV cabinet creaks

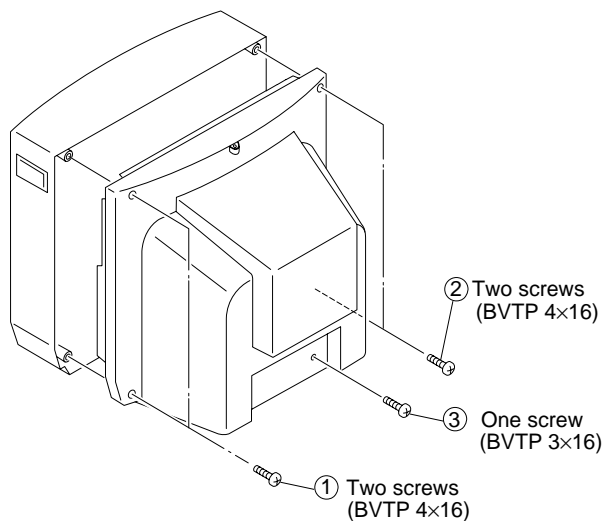
- ➔ Even if the picture or the sound is normal, changes in the room temperature sometimes make the TV cabinet expand or contract, making a noise. This does not indicate a malfunction.

WARNING

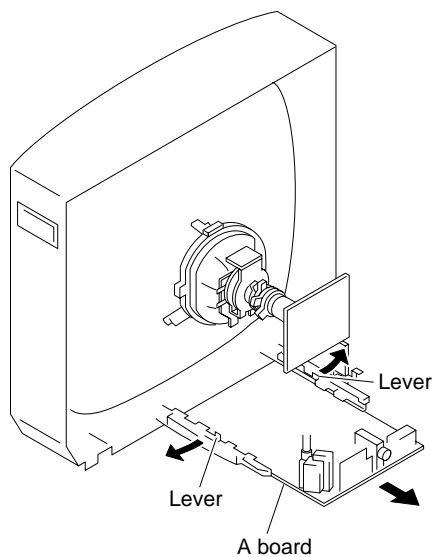
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

SECTION 2 DISASSEMBLY

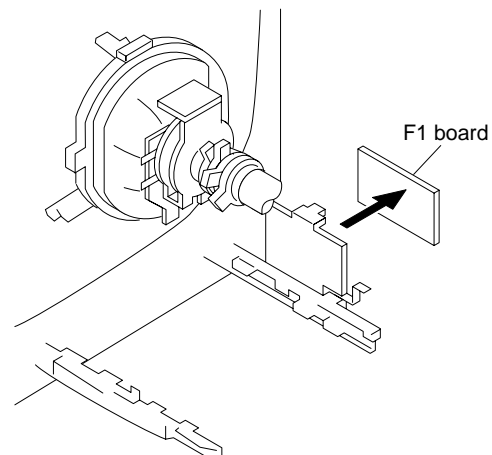
2-1. REAR COVER REMOVAL



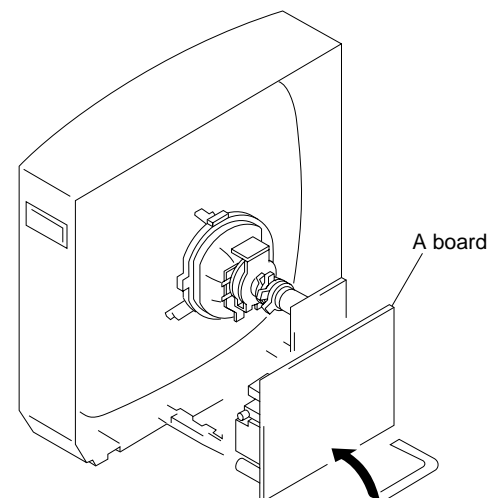
2-2. A BOARD REMOVAL



2-3. F1 BOARD REMOVAL (EXCEPT FOR KV-T21MN81)



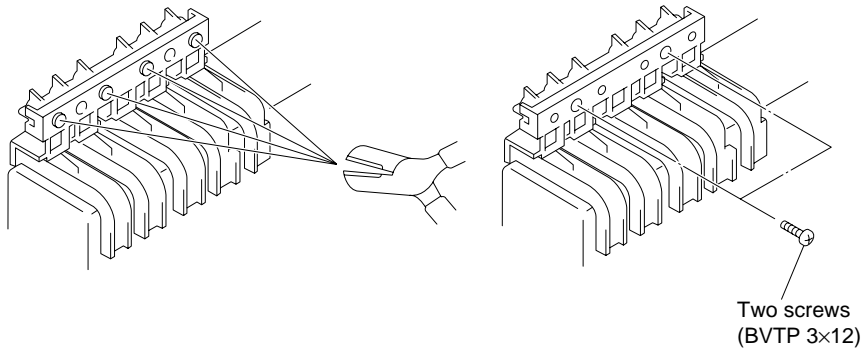
2-4. SERVICE POSITION



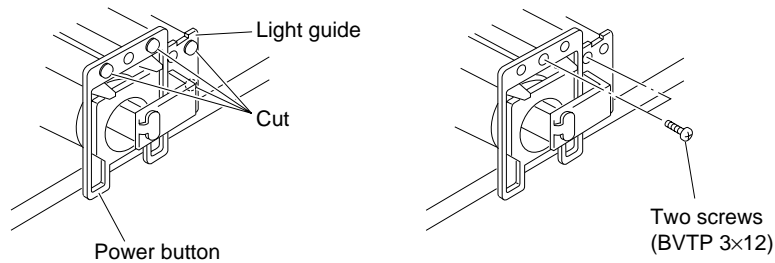
2-5. REPLACEMENT OF PARTS

For replacement of the Multi Button, Power Button and Light Guide, cut the welded portions from them, exchange with the new parts, and fix them with screws (+BVTP) respectively.

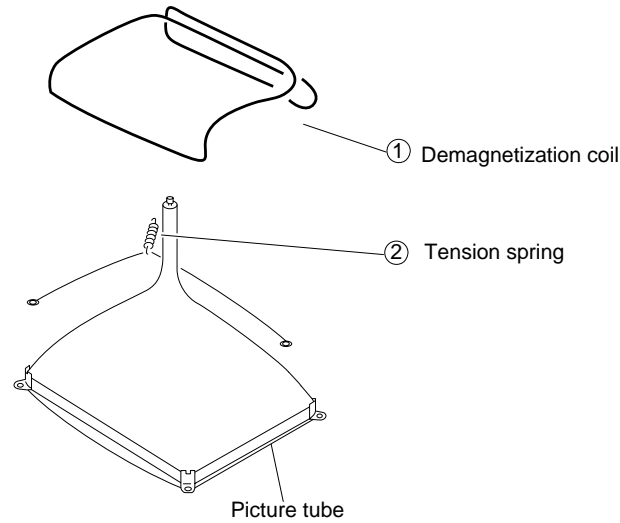
2-5-1. REPLACEMENT OF MULTI BUTTON



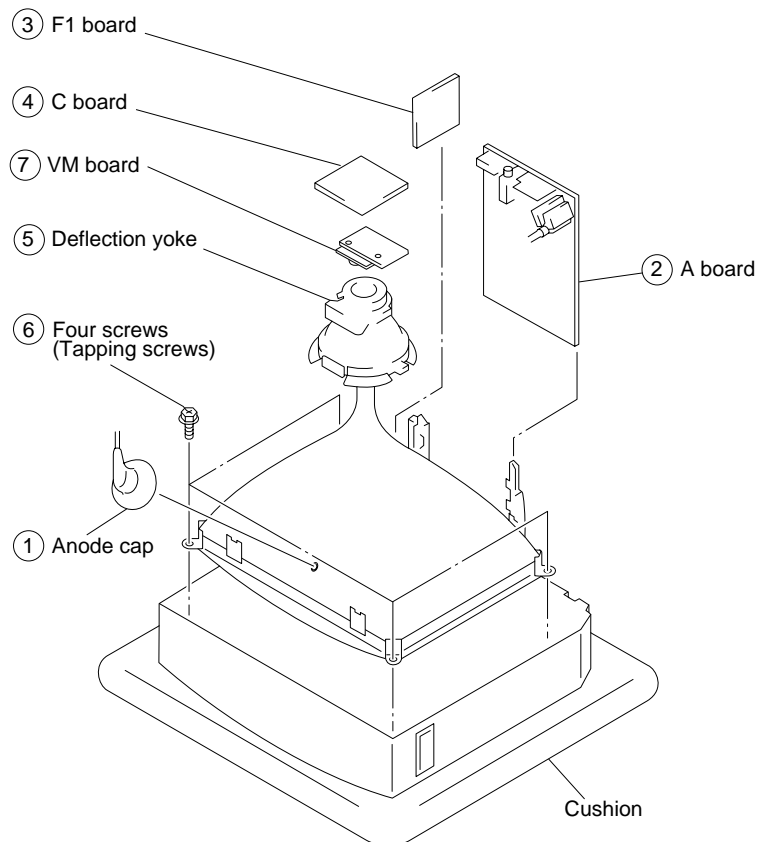
2-5-2. REPLACEMENT OF POWER BUTTON AND LIGHT GUIDE



2-6. DEMAGNETIZATION COIL REMOVAL



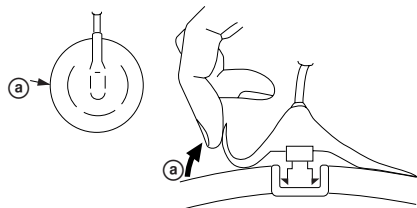
2-7. PICTURE TUBE REMOVAL



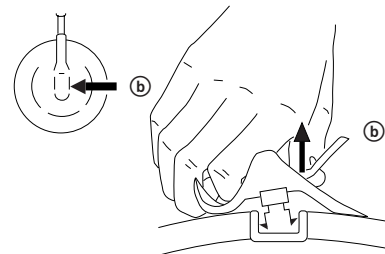
•REMOVAL OF ANODE-CAP

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

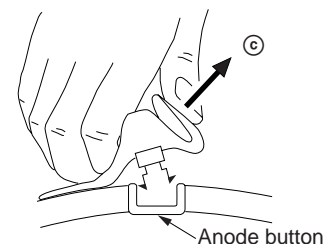
•REMOVING PROCEDURES



- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①.



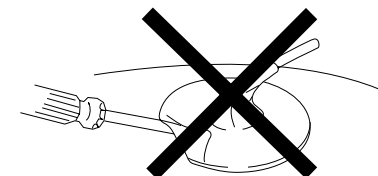
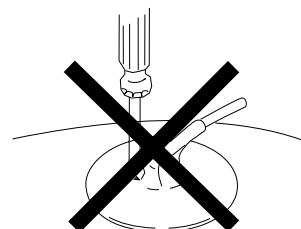
- ② Using a thumb press down then pull up the rubber cap firmly in the direction indicated by the arrow ②.



- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ③.

• HOW TO HANDLE AN ANODE-CAP

- ① Do not damage the surface of anode-caps with sharp shaped objects.
- ② Do not press the rubber too hard so as not to damage the inside of anode-caps. A metal fitting called the shatter-hook terminal is built into the rubber.
- ③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switch should be set as follows unless otherwise noted:

PICTURE control normal

BRIGHTNESS control normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

Preparation :

- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the power and degauss with the degausser.

3-1. BEAM LANDING

1. Input a white signal with the pattern generator.
 Contrast } normal
 Brightness }
2. Position neck assy as shown in Figure 3-1.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.
 (See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 3-1.)
6. Switch the raster signal to blue, then to red and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screw.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.
 (See Figure 3-4.)

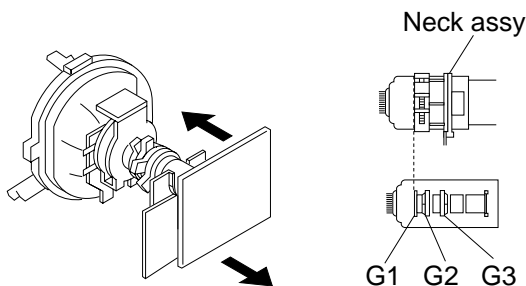


Fig. 3-1

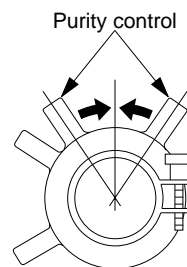


Fig. 3-2

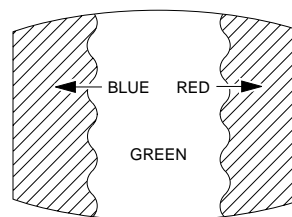


Fig. 3-3

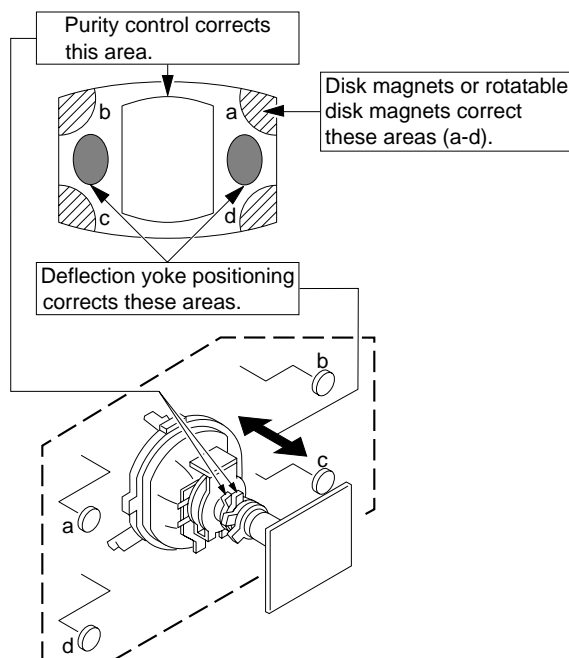


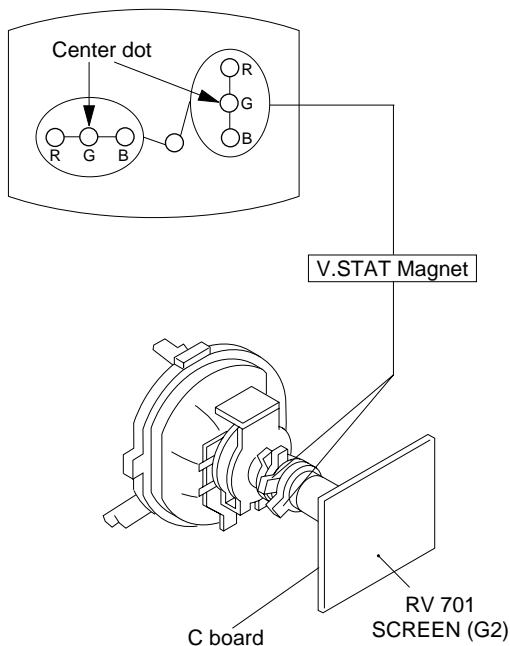
Fig. 3-4

3-2. CONVERGENCE

Preparation :

- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

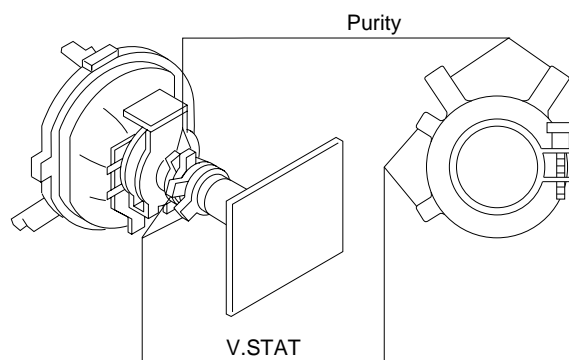
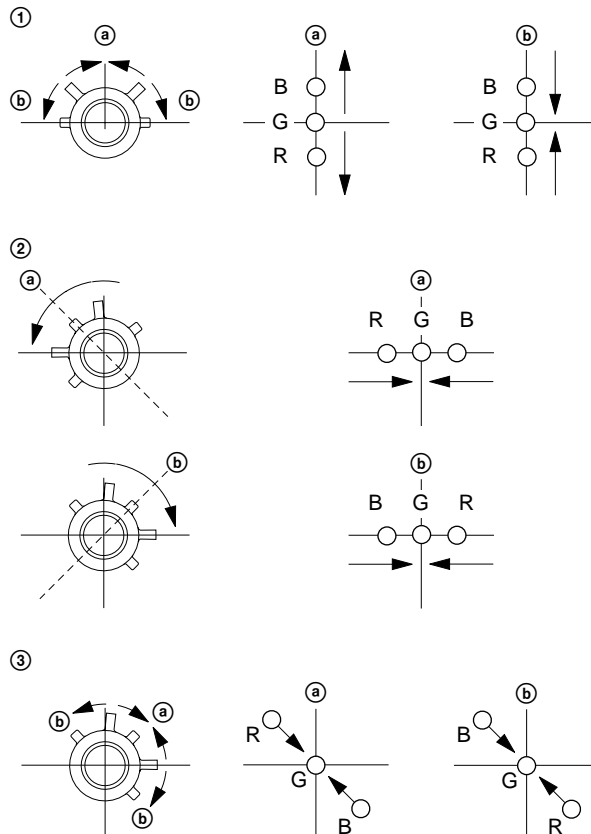
(1) Horizontal and Vertical Static Convergence



1. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving horizontally), adjust the H.STAT VR magnet so that the red, green and blue dots are on top of each other at the center of the screen.

- Operation of the V.STAT magnet.

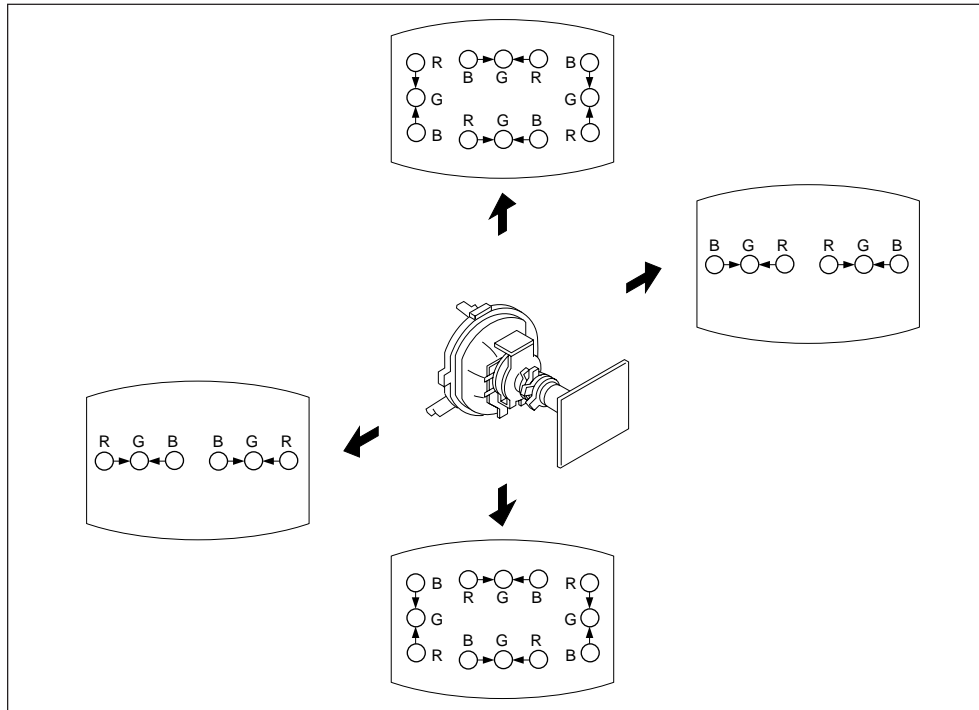
If the V.STAT magnet is moved in the direction of the (a) and (b) arrows, the red, green and blue dots move as shown below.



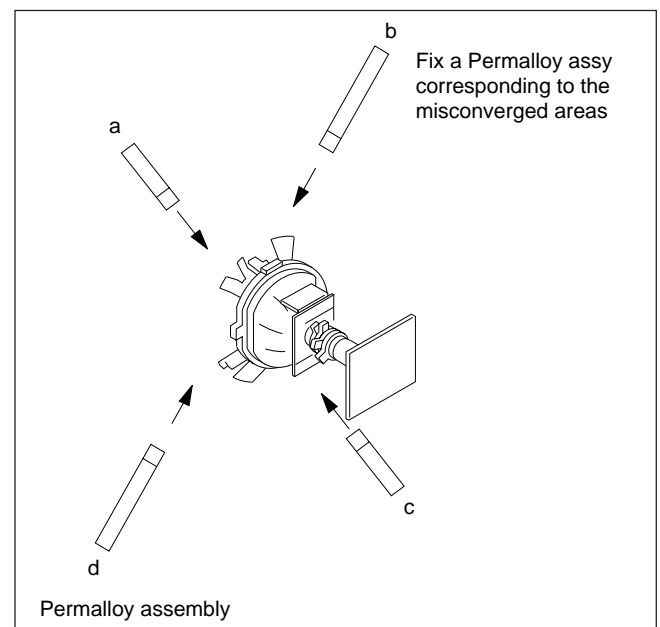
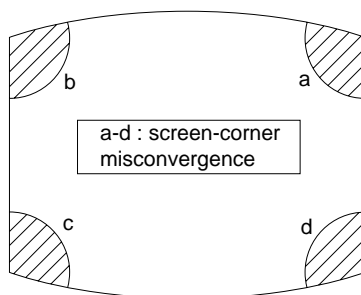
(2) Dynamic Convergence Adjustment

Preparation :

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.
1. Slightly loosen the deflection yoke screws.
 2. Remove the deflection yoke spacer.
 3. Move the deflection yoke as shown in the figure below and optimize the convergence.
 4. Tighten the deflection yoke screws.
 5. Install the deflection yoke spacer.

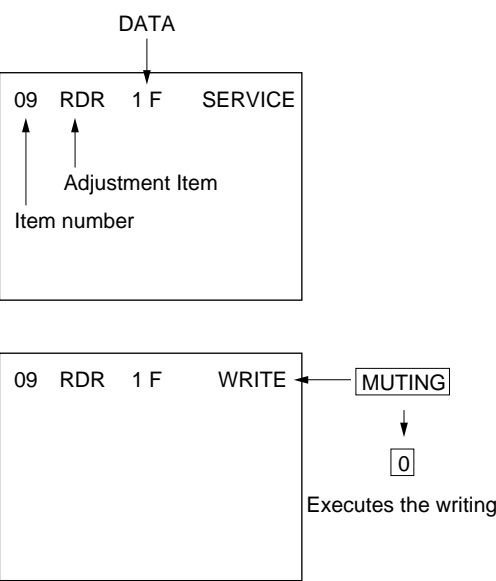
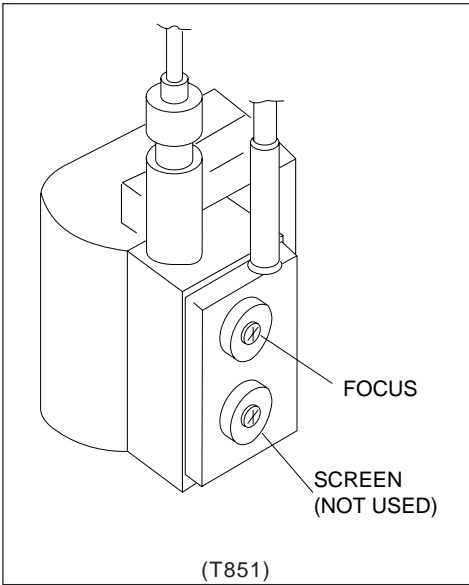


(3) Screen-corner Convergence



3-3. FOCUS ADJUSTMENT

Adjust FOCUS control on the flyback transformer for the best focus.



a. AN ITEM OF ADJUSTMENT

Item number	Adjustment item	Initial DATA	Note
09	RDR	28	WHITE POINT R
0A	GDR	20	WHITE POINT G
0B	BDR	20	WHITE POINT B

b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press **POWER** button on the commander) and then press **POWER** button again, hereupon it becomes TV mode.

c. METHOD OF WRITE FOR MEMORY

- 1) Set to Service Mode.
- 2) Press **1** (UP) and **4** (DOWN) to select an item of adjustments.
- 3) Press **MUTING** button and it will indicate WRITE on screen.
- 4) Press **0** button to write into memory.

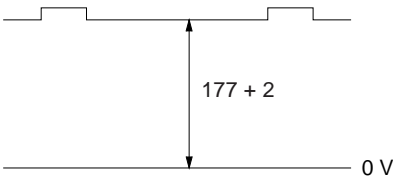
d. MEMORY WRITE CONFIRMATION METHOD

- 1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again to confirm adjustments were made.

3-4. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

1. G2 (SCREEN) ADJUSTMENT (RV701)

- 1) Set the PICTURE and BRIGHTNESS to normal.
- 2) Put to VIDEO input mode without signals.
- 3) Connect R, G and B of the C board cathode to the oscilloscope.
- 4) Adjust G2 (RV701) volume to the value below.



2. WHITE BALANCE ADJUSTMENTS

- 1) Set to Service Mode.
- 2) Input an entire white signal.
- 3) Set the PICTURE to maximum.
- 4) Select RDR(09) with **1** and **4** , and then set the level to 28 with **3** and **6** .
- 5) Select GDR(0A) and BDR(0B) with **1** and **4** and adjust the level with **3** and **6** for the best white balance.
- 6) Write into the memory by pressing **MUTING** → then **0** .

SECTION 4

SELF DIAGNOSIS FUNCTION

If no acknowledgement is returned from a device which is turned "ON", the device has a problem.
In this case, one of the LED's responding to the problem device will flicker a defined number of times.

Flickering is operated by lighting the LED's for 60ss each time.

The flickering frequency responding to each failed device is shown below.

Device	NONVOLATILE MEMORY (CAT24C04P)	—	Y/C JUNGLE (TDA8375A)	—	—	TONE CONTROL (TDA8424)
Flickering Frequency	1	—	3	—	—	6

All the devices are checked one after another from the left of the table.

If an error is found, the responding LED will start flickering.

So, if more than 1 device have failed, only the one on the left side will flicker.

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-870 that comes with this unit.

Entering service mode

With the unit on standby

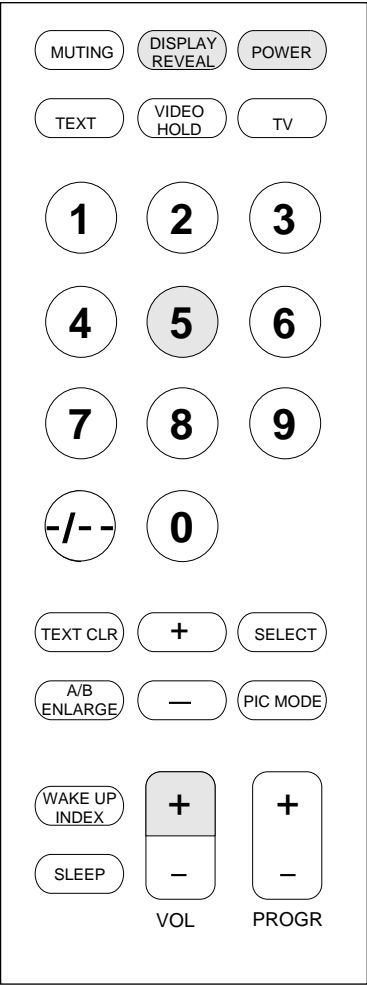
DISPLAY

5

VOL (+)

POWER

The operation sequence puts the unit into service mode.



RM-870

1, 4

3, 6

MUTING

0

Raise/lower the service item number

Raise/lower the data

Writes

Executes the writing

7, 0

8, 0

5, 0

2, 0

All the data becomes the values in memory

All user control goes to the standard state

Service data initialization (Be sure not to use usually.)

Write 50Hz adjustment data to 60Hz, or vice versa.

The screen display is :

Adjustment item

DATA

00 RGB 08 SERVICE

0000 1000 50

Item number

Mode

Depends on the signals

PAL, SECAM : 50

NTSC : 60

1, 4

3, 6

MUTING

0

Select the adjustment item.

Raise/lower the data.

Writes

Executes the writing.

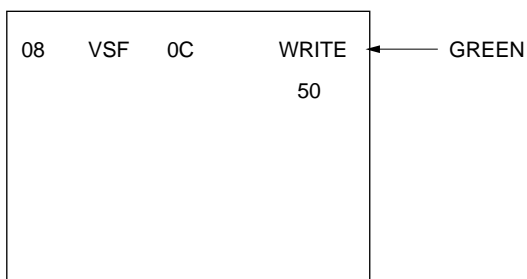
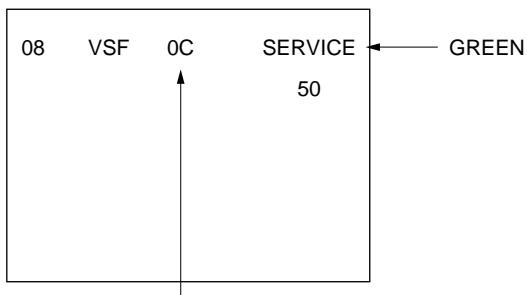
5-2. ADJUSTMENT METHOD

Item Number 08

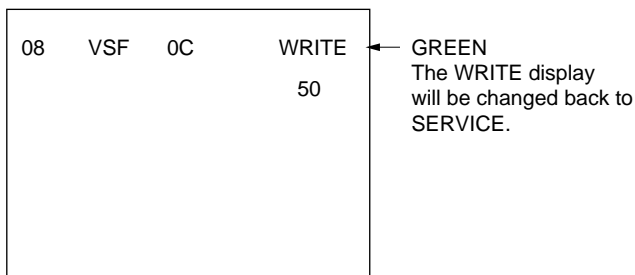
This explanation uses V-SHIFT as an example.

1. Select 08 V-SHIFT with the [1] and [4] buttons.
2. Raise/lower the data with the [3] and [6] buttons.
3. Select the optimum state. (The standard is 0F for PAL reception.)
4. Write with the [MUTING] button.
5. Execute the writing with the [0] button. (The WRITE display will be changed to green SERVICE.)

Use the same method for Items Number 00-4B. Use [1] and [4] to select the adjustment item, use [3] and [6] to adjust, write with [MUTING], then execute the write with [0].



Written with the [MUTING].



Write executed with [0].

Adjustment Item Table

Item number	Adjustment Item	Data range	Initial data	Standard data			Note	Device
00	HSF	00-3F		50: 2C	60: 33	H SHIFT	TDA8375	
01	HSZ	00-3F		50: 30	60: 30	H SIZE	TDA8375	
02	PAP	00-3F		50: 25	60: 25	PIN AMPLITUDE	TDA8375	
03	CNP	00-3F		50: 10	60: 0C	CORNER PIN	TDA8375	
04	TLT	00-3F		50: 20	60: 2D	TILT	TDA8375	
05	VSL	00-3F		50: 1F	60: 1F	V SLOPE	TDA8375	
06	VAP	00-3F		50: 1C	60: 1B	V AMPLITUDE	TDA8375	
07	SCR	00-3F		50: 16	60: 16	S CORRECTION	TDA8375	
08	VSF	00-3F		50: 15	60: 15	V SHIFT	TDA8375	
09	RDR	00-3F	28				WHITE POINT R	TDA8375
0A	GDR	00-3F	20				WHITE POINT G	TDA8375
0B	BDR	00-3F	20				WHITE POINT B	TDA8375
0C	FO	00-03	30	TV: 00	VIDEO: 00	TEXT: 01	Ø-1 TIME CONSTANT	TDA8375
0D	AGC	00-3F					AGC TAKE OVER	TDA8375
0E	VSW	00-01		TV: 00	VIDEO: 01	TEXT: 00	VIDEO MUTE	TDA8375
0F	FOR	00-03	03				FORCED FIELD FREQ.	TDA8375
10	DL	00-01	00				INTERLACE	TDA8375
11	POC	00-01	00				SYNCHRO MODE FIX	TDA8375
12	VID	00-01	00				VIDEO IDENT MODE	TDA8375
13	HCO	00-01	00				EHT TRACKING MODE	TDA8375
14	EVG	00-01	00				ENABLE V GUARD	TDA8375
15	SBL	00-01	00				SERVICE BLANKING	TDA8375
16	PRD	00-01	00				OVER-VOLTAGE INPUT	TDA8375
17	COR	00-01	00				NOISE CORING PEAK	TDA8375
18	PMX	00-3F	2B				PICTURE MAX DATA	TDA8375
19	PMI	00-3F	04				PICTURE MIN DATA	TDA8375
1A	SBR	00-7F	4B				SUB-BRIGHTNESS	TDA8375
1B	SHU	00-0F	06				SUB-HUE	TDA8375
1C	SSH	00-03	01	TV: 01	VIDEO: 02	SUB-SHARPNESS		TDA8375
1D	SC1	00-3F	1F	50: 26	60: 29	SUB-COLOR LOWER		TDA8375
1E	SC2	00-3F	0B	50: 0C	60: 0F	SUB-COLOR HIGHER		TDA8375
1F	AIP	00-7F	3F				ADJUSTMENT IF PLL	TDA8375
20	VZM	00-3F	19				VERTICAL ZOOM	TDA8375

Adjustment Item Table

Item number	Adjustment Item	Data range	Initial data	Standard data	Note	Device
21	FAW	00–FF	08		NICAM FAW THRESH	MSP3410
22	CTM	00–FF	08		NICAM ERROR BIT (MONO)	MSP3410
23	CTN	00–FF	50		NICAM ERROR BIT (NICAM)	MSP3410
24	WCD	00–FF	0A		W. G. CHANGE DATA	MSP3410
25	WST	00–FF	15		W. G. STEREO CUT POINT	MSP3410
26	WTM	00–FF	50		W. G. TIMER CHANGE	MSP3410
27	WBT	00–FF	EA		W. G. BILINGUAL CUT POINT	MSP3410
28	ACG	00–01	01		AGC AUTO/CONSTANT	MSP3410
29	CDB	00–3F	28		AGC GAIN CONSTANT	MSP3410
2A	FGP	00–7F	24		FM (BG, I, DK) PRESCALE	MSP3410
2B	FMP	00–7F	40		FM (M) PRESCALE	MSP3410
2C	WGP	00–7F	3C		W. G. PRESCALE	MSP3410
2D	NIP	00–7F	7F		NICAM PLESCALE	MSP3410
2E	CRM	00–01	00		CARRIER MUTE	MSP3410
2F	CML	00–03	00		CARRIER MUTE LEVEL	MSP3410
30	ACO	00–01	01		AUDIO CLOCK OUT	MSP3410
31	WAC	00–01	01		W. G. AGREEMENT COUNT	MSP3410
32	DLY	00–FF	30		STEREO SEARCH DELAY	MSP3410
33	DLG	00–FF	10		INTERVAL OF ID CHECK	MSP3410
34	TXP	00–0F	07		TEXT PICTURE	SAA5281
35	MXP	00–0F	0A		TEXT MIX MODE PICTURE	SAA5281
36	BKP	00–3F	00		BLK OFF PICTURE	μ-CON
37	HBL	00–3F	25		H BLK LEFT WIDTH	μ-CON
38	HBR	00–3F	20		H BLK RIGHT WIDTH	μ-CON
39	VBH	00–7F	00		V BLK HIGHT WIDTH	μ-CON
3A	VLB	00–FF	FF		V BLK LOW WIDTH	μ-CON
3B	ODL	00–FF	10		POWER ON DELAY	μ-CON
3C	OFR	00–0F	00		STBY → ON RGB OUT	μ-CON
3D	OFM	00–0F	00		MAIN POWER RGB OUT	μ-CON
3E	OSH	00–3F	0A		OSD POSITION H	μ-CON
3F	DKS	00–01	00		D/K NICAM	μ-CON
40	MUT	00–01	00		NO SYNC. MUTE	μ-CON
41	DWZ	00–01	00		DISEBLE WIDEZOOM	μ-CON
42	ABL	00–01	00		BRIGHT ABL	μ-CON
43	DTV	00–01	00		DISABLE TV SYSTEM KEY	μ-CON
44	SCM	00–01	00		SECAM TRAP ACTIVE	μ-CON
45	ROC	00–0F	07		ROTATION CENTER	μ-CON
46	ROS	00–07	03		ROTATION STEP WIDTH	μ-CON
47	DVM	00–01	00		DISABLE VM MUTE	μ-CON
48	FBT	00–01	01		C/M FOR FBT LAYER SHORT	μ-CON
49	OP0	00–FF	40		OPTION 0	μ-CON
4A	OP1	00–FF	07		OPTION 1	μ-CON
4B	OP2	00–FF	00		OPTION 2	μ-CON

NOTE

- Standard Data: Those are the standard data values written on the microprocessor. Therefore, the data values of the modes are stored respectively in the memory.
In case of a device replacement, adjustment by rewriting the data value is necessary for some items.
- 50 50 Hz data
- 60 60 Hz data
- Standard data listed on the adjustment item table are reference values, therefore it is different for every model.

ITEM INFORMATION

- 10. DL: TV/MIX Mode 0=Interlace 1=Non interlace, TEXT Mode 0=Non interlace 1=Interlace
- 42. ABL: Bright ABL ON/OFF ON=1 OFF=0
- 49. OP0, • 4A. OP1 • 4B. OP2 :
Input data are different according to models.
AV INPUT : 00 → NO MODEL, 01 → MONO, CXA1315, 10/11 → STEREO, TDA8424
TV System : 00 → Multi model, 01 → B/G, 10 → D/K, I, 11 → B/G, D/K
NTSC, SECAM, Chin
Shrp : Dynamic Mode @ 1 → Sharpness 50%, 0 → Sharpness 70%.
VM Operation : 0 → OFF, 1 → ON

No. 49 OP0 * Input data are different according to models

Item	TILT	AV Input		Sharp 50%	Remote Preset	Auto Program	Video Text	Reserved
KV-T21MN8	0	1	0	0	0	1	0	0
KV-T21MN81	0	1	0	0	1	1	0	0

No. 4A OP1

Item	Wide	Tilt	—	TV System		NT3.58	SECAM	Chinese
KV-T21MN8	0	0	0	0	0	1	1	1
KV-T21MN81	0	0	0	0	0	1	1	1

No. 4B OP2

Item	—	—	—	—	High Dev.	100 Prg	—	S. Video
KV-T21MN8	0	0	0	0	0	1	0	0
KV-T21MN81	0	0	0	0	0	1	0	0

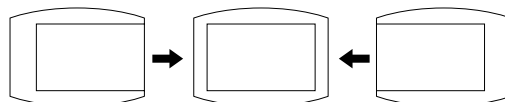
5-3. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT

1. Enter to Service Mode.
2. Press commander buttons **[5]** and **[0]** (Data Initialize), and **[2]** and **[0]** (Data Copy) to initialize the data.
3. Call each item number, and check if the respective screen shows the normal picture.
In case some items are not well-adjusted, give them fine adjustment.
Write the data per each item number (**[MUTING]** + **[0]**).
4. Select item numbers “49” (OP0), “4A” (OP1) and “4B” (OP2) and respectively set the bit per model with command buttons **[3]** and **[6]**.
5. Press commander buttons **[8]** and **[0]** (Test Normal) to return to the data that was set on the shipment from the factory.
(= Cancel Service Mode.)

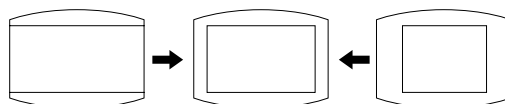
5-4. PICTURE DISTORTION ADJUSTMENT

Item Number 00 – 08

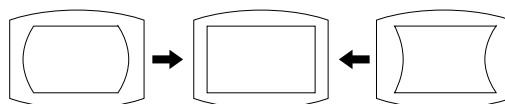
00 HSF (H SHIFT)



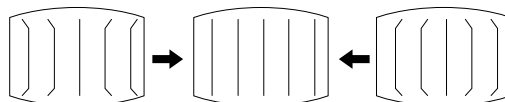
01 HSZ (H SIZE)



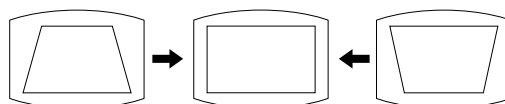
02 PAP (PIN AMPLITUDE)



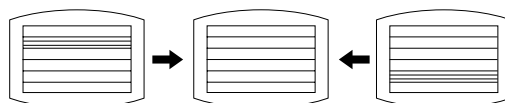
03 CNP (CORNER PIN)



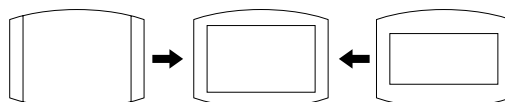
04 TLT (TILT)



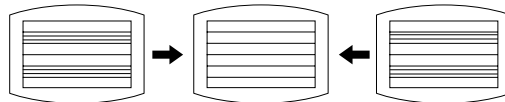
05 VSL (V SLOPE)



06 VAP (V AMPLITUDE)



07 SCR (S CORRECTION)

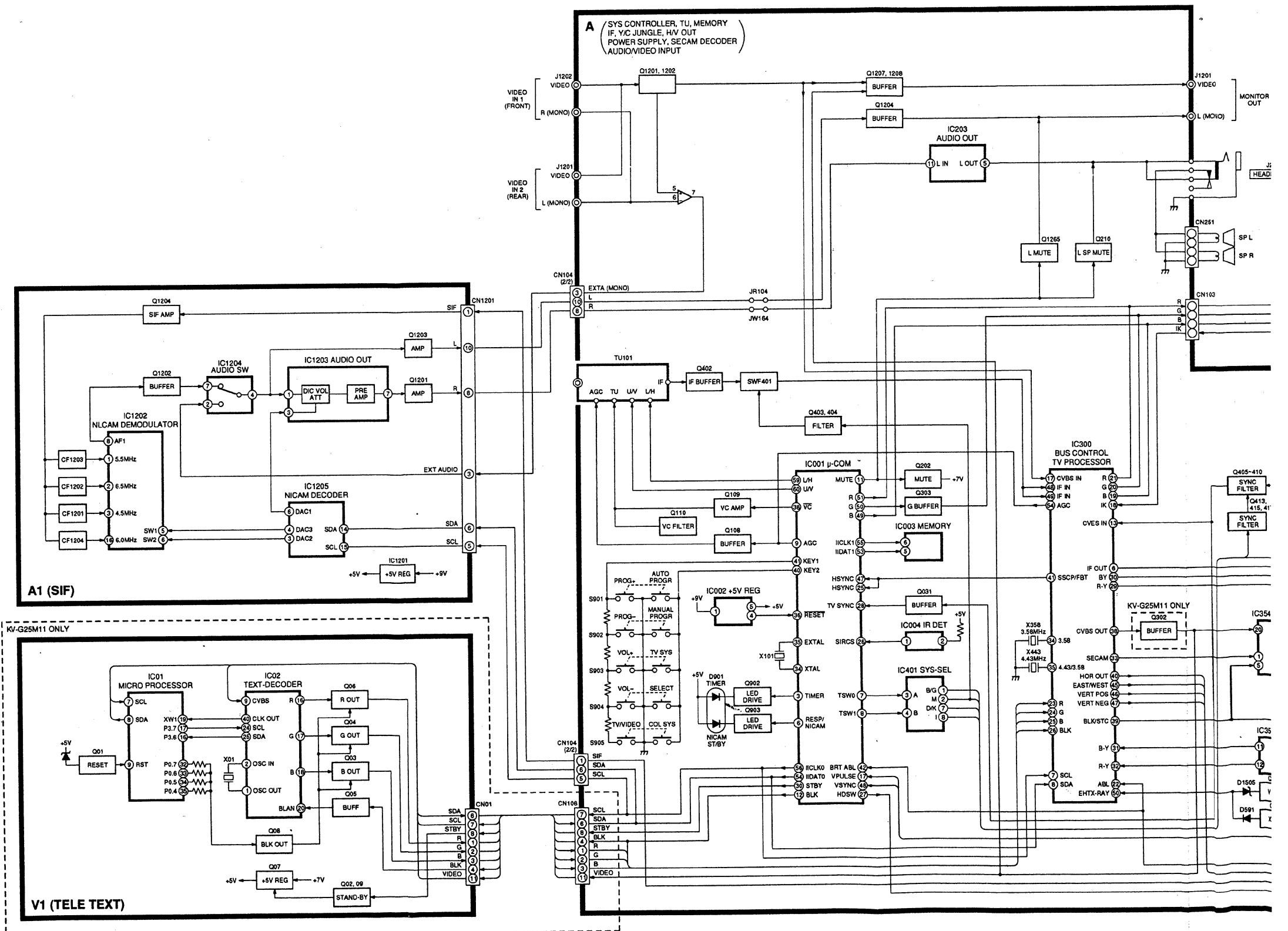


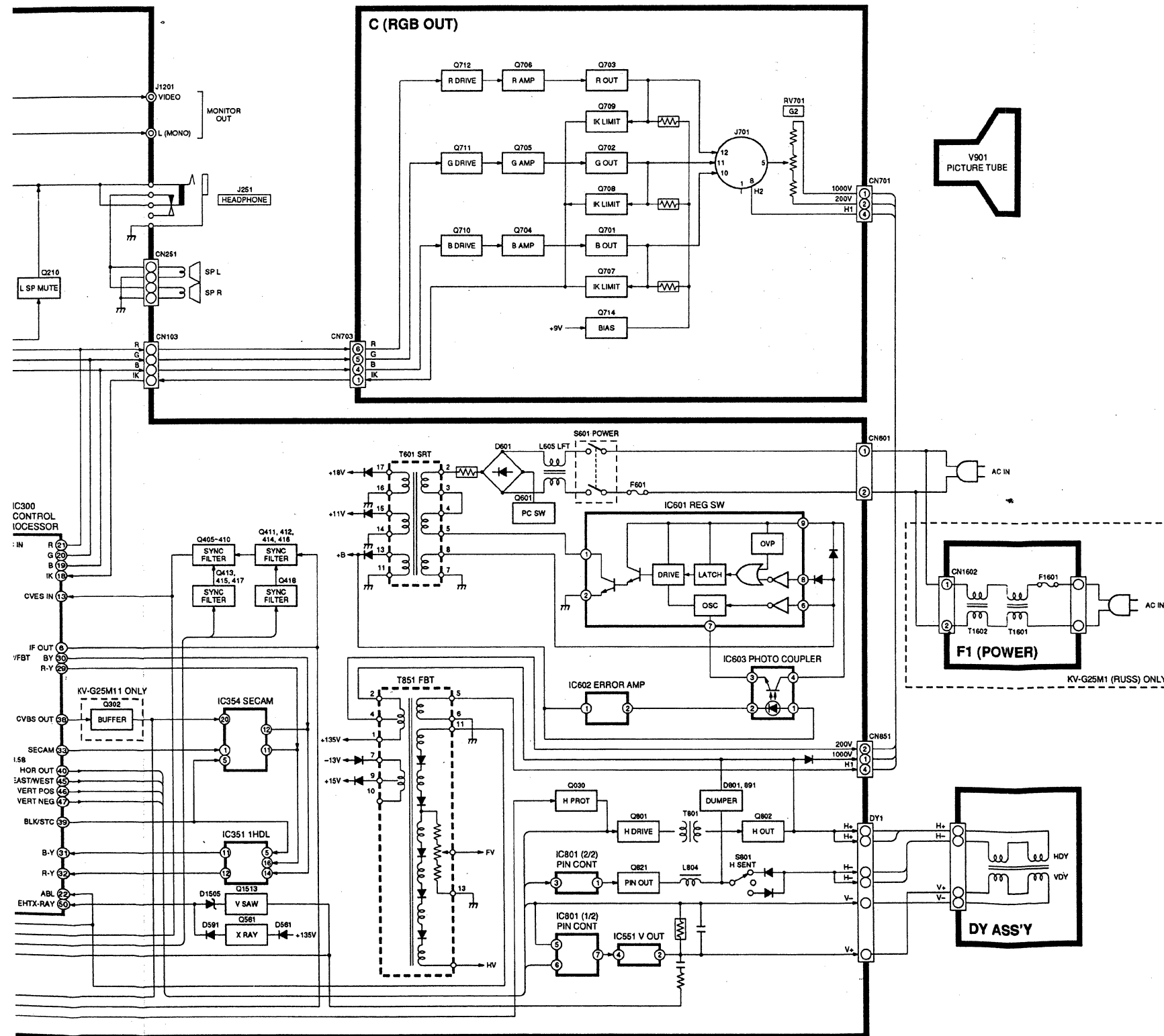
08 VSF (V SHIFT)



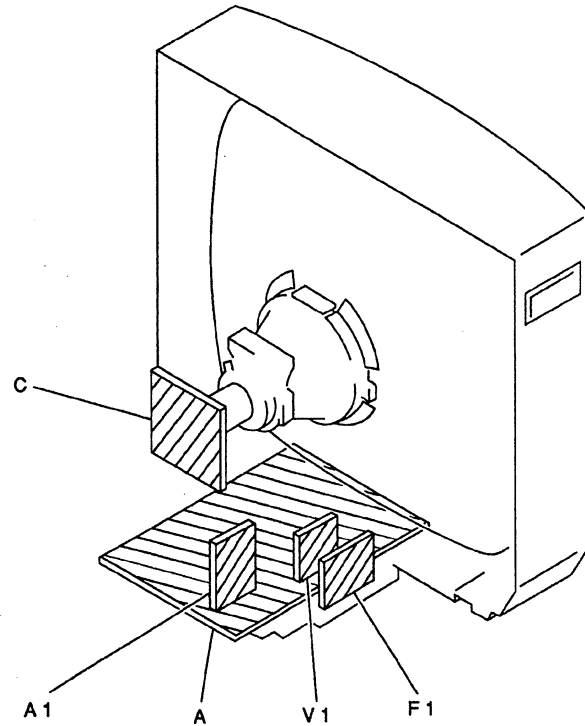
MEMO

5-1. BLOCK DIAGRAMS





5-2. CIRCUIT BOARDS LOCATION



5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted. pF : μF 50 WV or less are not indicated except for electrolytic and tantalums.
- All resistors are in ohms.
 $\text{k}\Omega = 100\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4W (CHIP: 1/10W)

- : nonflammable resistor.
- : internal component.
- : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- Readings are taken with a color-bar signal input.
no mark : PAL
() : SECAM
< > : NTSC 4.43
- Readings are taken with a 10 $\text{M}\Omega$ digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
 - * : Can not be measured.
- Circled numbers are waveform reference.
- : B + bus.
- : B - bus.
- : signal path.

Reference Information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFRAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE

Note: The component identified by shading and mark are critical for safety. Replace only with part number specified.

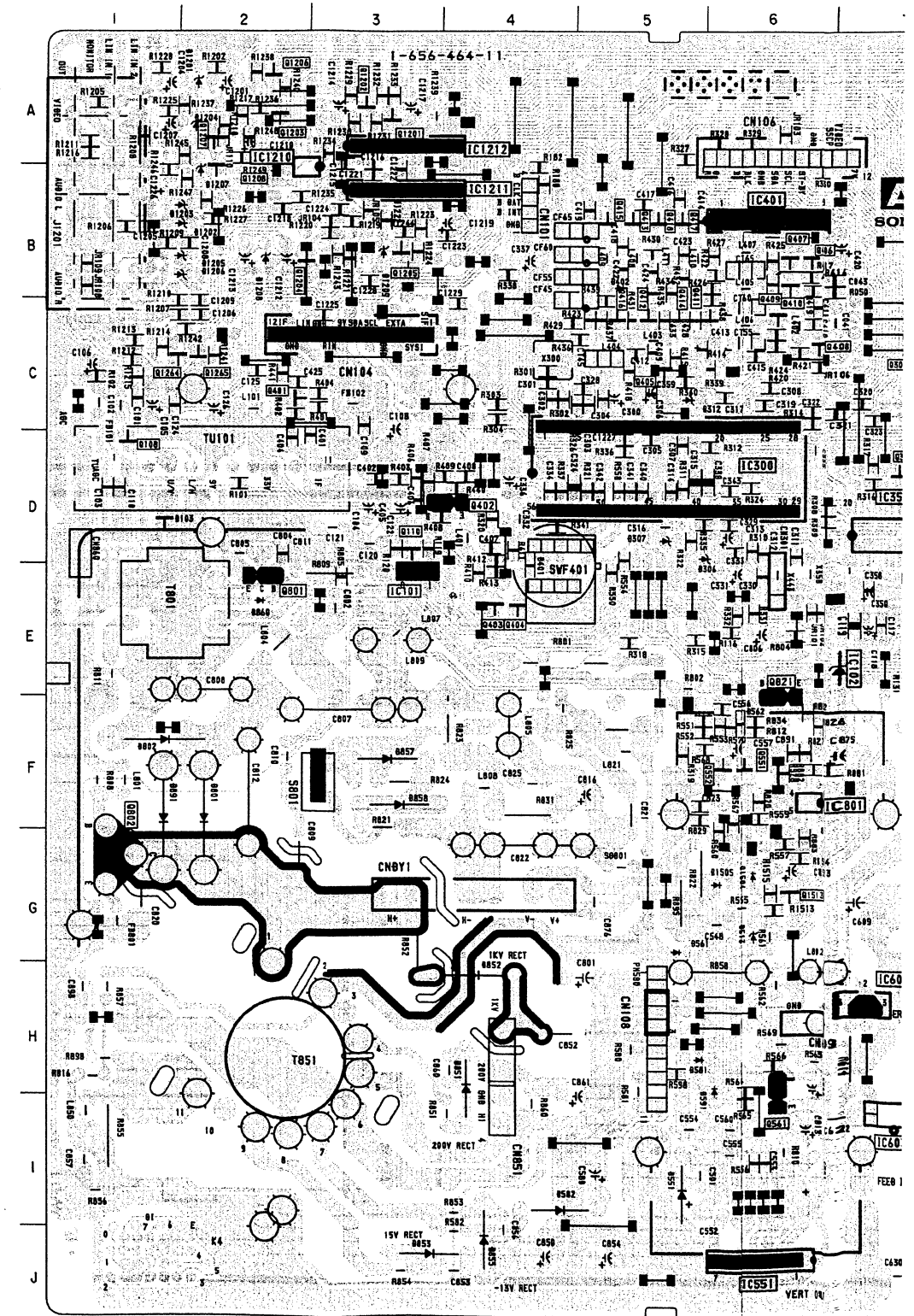
PRINTED WIRING BOARD

A [SYS CONTROLLER, TU, MEMORY, IF, Y/C JUNGLE
H/V OUT, POWER SUPPLY, SECAM DECODER, AUDIO/VIDEO INPUT]

A BOARD

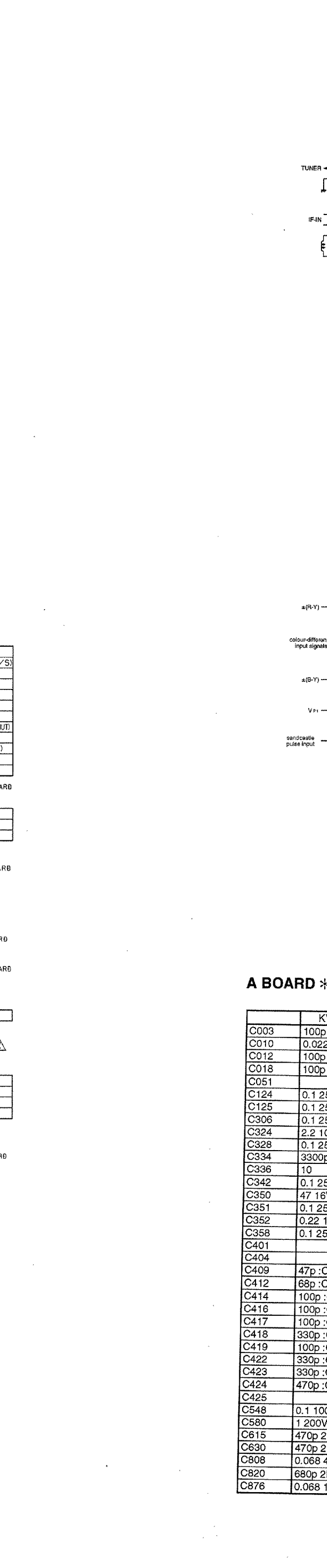
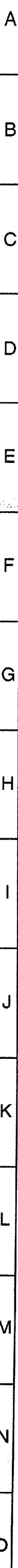
IC		Q1208 B-2	Q1265 C-2	Q1513 G-6
IC001 D-11				
IC002 E-10				
IC003 E-11				
IC004 I-13				
IC102 E-7				
IC203 B-10				
IC300 D-6				
IC351 D-8				
IC354 D-7				
IC401 B-6				
IC521 E-8				
IC551 J-6				
IC601 J-8				
IC602 H-7				
IC603 I-7				
IC801 F-6				
IC1210 A-2				
DIODE				
D001 D-9				
D002 C-12				
D003 C-10				
D004 E-12				
D005 E-8				
D101 B-8				
D102 B-9				
D103 D-1				
D251 B-8				
D252 B-13				
D301 C-7				
D302 D-8				
D303 D-8				
D304 C-8				
D305 D-7				
D306 D-6				
D307 D-5				
D308 C-10				
D310 D-8				
D311 D-8				
D312 C-5				
D313 D-8				
D314 D-8				
D351 E-8				
D401 D-4				
D402 B-5				
D403 B-9				
D513 G-6				
D551 I-5				
D561 G-5				
D591 H-6				
D601 G-11				
D602 G-11				
D603 G-11				
D604 G-8				
D605 G-8				
D606 F-9				
D607 I-8				
D609 I-9				
D610 H-7				
D611 I-8				
D801 F-2				
D802 F-1				
D851 H-4				
D852 H-4				
D853 J-3				
D855 J-4				
D857 F-3				
D858 F-3				
D860 E-2				
D891 F-1				
D901 H-13				
D1201 A-2				
D1202 B-2				
D1207 B-2				
D1208 B-2				
D1504 G-6				
D1505 G-6				
TRANSISTOR				
Q030 C-12				
Q031 C-8				
Q108 D-1				
Q109 E-12				
Q110 D-3				
Q202 B-8				
Q207 B-10				
Q208 B-10				
Q210 B-9				
Q301 C-7				
Q302 D-7				
Q303 C-8				
Q402 D-4				
Q403 E-4				
Q404 E-4				
Q405 C-5				
Q406 B-6				
Q407 B-6				
Q408 C-6				
Q409 C-6				
Q410 B-6				
Q411 C-6				
Q412 C-5				
Q413 B-5				
Q414 C-5				
Q415 B-5				
Q416 C-5				
Q417 B-5				
Q418 B-5				
Q561 I-6				
Q601 G-12				
Q801 E-2				
Q802 G-1				
Q821 E-6				
Q902 H-13				
Q903 H-13				
Q1201 A-3				
Q1202 A-3				
Q1203 A-2				
Q1204 B-2				
Q1207 A-2				

- A Board -



A [SYS CONTROLLER, TU, MEMORY, IF, Y/C JUNGLE
H/V OUT, POWER SUPPLY, SECAM DECODER, AUDIO/VIDEO INPUT

- A Board -



The diagram illustrates the internal components and signal paths of a color television receiver. Key sections include:

- Audio Section:** Processes 'ENT AUDIO IN' through a '15 VOLUME' control, a '10-AMP TRANSDUCER', and a 'CONTROL DAC 1 3.4.4-BIT 2' to produce 'SOUND OUTPUT'.
- Video Section:** Starts with 'SIF-IN' passing through 'FILTERS' and a 'PRE-AMPLF.' to a 'VIDEO AMPLF.' which outputs 'VIDEO AMP.' and 'VIDEO MUTE'. The 'VIDEO MUTE' signal is also sent to a 'VIDEO MUTE' control block.
- Control Section:** Features a 'T.D.P.' (Tuning Diode Processor) connected to an 'AFC FOR TV TUNER' and a 'POL' (Polarization) control. It also includes an 'AFC GEN' (Automatic Frequency Control Generator) and an 'AFC IDENT' (Automatic Frequency Control Identification) block.
- Demodulation and Tuning:** The 'VF AMPLIFIER DEMODULATION' block outputs to an 'AFC GEN' and an 'AFC IDENT'. The 'AFC GEN' also feeds into the 'VIDEO AMPLF.'. The 'AFC IDENT' outputs to a 'VIDEO IDENT' block.
- Signal Processing:** The 'VIDEO AMPLF.' output goes through a 'TRAP' and 'PASS' filter, then a 'SW' (Switch) to a 'SW-SWITCH' block. The 'SW-SWITCH' outputs to a 'CHVS-SWITCH' block, which then feeds into a '10-AMP TRANSDUCER'.
- Control and Timing:** A 'CONTROL DAC 1 3.4.4-BIT 2' block provides a 'REF' (Reference) signal to the '10-AMP TRANSDUCER' and a 'REF' signal to a 'PULSE TUNING' block. The 'PULSE TUNING' block outputs to a 'DELAY FEEDBACK' block, which then feeds into a 'POS. MATRIX OUTPUT' block.
- Output and Monitoring:** The '10-AMP TRANSDUCER' outputs to a 'SW-SWITCH' block, which then feeds into a 'CHVS-SWITCH' block. The 'CHVS-SWITCH' outputs to a '10-AMP TRANSDUCER' block, which then feeds into a 'POS. MATRIX OUTPUT' block. The 'POS. MATRIX OUTPUT' block outputs to a 'POS. MATRIX OUTPUT' block, which then feeds into a 'POS. MATRIX OUTPUT' block.
- Power and Timing:** The '10-AMP TRANSDUCER' block outputs to a 'SW-SWITCH' block, which then feeds into a 'CHVS-SWITCH' block. The 'CHVS-SWITCH' outputs to a '10-AMP TRANSDUCER' block, which then feeds into a 'POS. MATRIX OUTPUT' block. The 'POS. MATRIX OUTPUT' block outputs to a 'POS. MATRIX OUTPUT' block, which then feeds into a 'POS. MATRIX OUTPUT' block.

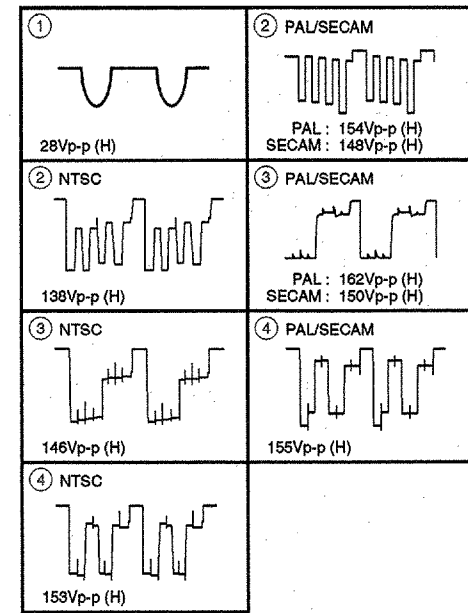
The block diagram of the TDA4665 IC illustrates its internal architecture. It features two input channels, each starting with a 'SIGNAL CLAMPING' block (pins 18 and 14) and a 'pre-amplifier' (triangles). The signals then pass through 'LINE MEMORY' blocks, followed by 'SAMPLE AND HOLD' and 'LP' (low-pass) filter blocks. The outputs of these channels are combined in 'adder output buffers' to produce the final 'output difference signal' at pins 11 and 12, labeled $x(nT)$ and $y(nT)$ respectively. A '5MHz shifting clock' is distributed to the 'SAMPLE AND HOLD' blocks and a 'DIVIDER BY 162' block. The control section includes a 'HANDSHAKE DETECTOR' (pin 12), a 'FREQUENCY PULSE DETECTOR', and a 'DIVIDER BY 162' (pin 10). A '5MHz' clock input (pin 6) is also shown. The diagram is labeled 'TDA4665' in the center.

KV-729CF1		KV-729CF1		KV-729CF1		KV-729CF1	
C003	1000: CHIP	C1207	100 16V	L404	8.2uH /AL	R410	10k: CHIP
C010	0.022: CHIP	C1208	0.47 25V: CHIP	L405	8.2uH /AL	R411	10k: CHIP
C012	1000: CHIP	C1207	0.1 25V B:CHIP	L407	15uH /AL	R412	6.8k: CHIP
C018	1000: CHIP	C1229	0.47 25V: CHIP	L408	1.8uH	R413	2.2k: CHIP
C051		C1230	0.1 25V B:CHIP	L409	2.2uH	R415	220: CHIP
C124	0.1 25V B:CHIP	CF45	152709900	L411	2.7uH	R417	220: CHIP
C125	0.1 25V B:CHIP	CF55	156709900	Q401	#	R418	680: CHIP
C306	0.1 25V B:CHIP	CF60	156710000	Q403	DTCT43TK	R422	120: CHIP
C324	2.2 10V B:CHIP	CF65	156710111	Q404	DTCT43TK	R423	150: CHIP
C328	0.1 25V B:CHIP	CN106	6 5 #	Q403	DTCT43TK	R427	330: CHIP
C334	3300p B:CHIP	CT65	4.5 #	Q405	25A1037K	R428	22k: CHIP
C336	10	CT60	6	Q407	25A1037K	R430	470: CHIP
C342	0.1 25V B:CHIP	CT65	6.5 #	Q410	25A1037K	R441	22k: CHIP
C350	47 16V	D401	MA77-X	Q411	25C2412K	R432	470: CHIP
C351	0.1 25V B:CHIP	D402	15S119	Q412	25C2412K	R435	470: CHIP
C352	0.22 16V B:CHIP	D581	15S119	Q413	DTCT43TK	R436	22k: CHIP
C358	0.1 25V B:CHIP	D582	ELU2E - G2	Q415	DTCT43TK	R437	22k: CHIP
C401	#	D680	LN4S80	Q416	25C2412K	R441	#
C404	#	F601	#	Q417	DTCT43TK	R445	330k: CHIP
C409	47p: CHIP	IC001	CXP85224A-037S	Q418	DTCT43TK	R582	47: FPRD
C412	68p: CHIP	IC003	CAT240C4P	Q1209	25D601A	R598	1K: CHIP
C414	1000: CHIP	IC354	TDAG895T	R009	1K: CHIP	R635	#
C416	1000: CHIP	IC001	LA7910	R014	1K: CHIP	R616	#
C417	1000: CHIP	JR050	#	R020	#	R635	JW (S)
C418	930p: CHIP	JR052	#	R300	470k	R656	1K 1W: FUSE
C419	1000: CHIP	JR103	#	R319	470k: CHIP	R657	#
C420	1000: CHIP	JR107	#	R327	0: CHIP	R1250	820k: CHIP
C423	330p: CHIP	JR114	150p: CHIP	R308	0: CHIP	R1251	820k: CHIP
C424	470p: CHIP	JW032	15MM	R329	0: CHIP	R1252	2.2k: CHIP
C425	#	JW104	#	R330	300: CHIP	R1253	1.2k: CHIP
C548	0.1 100V: PT	JW132	15MM	R340	270: CHIP	R1255	10k: CHIP
C580	1 200V	JW161	12.5MM	R342	#	SWF401	176077111
C615	470p: 260V	JW172	#	R401	#	T851	NX-4002/M314
C630	470p: 250V	JW170	5MM	R402	#	ACCORD	#
C808	0.068 400V: PP	JW200	#	R403	#		
C820	580p 2KV	JW201	#	R404	#		
C876	0.088 1000V: PT	L403	12uH: ALI				

22

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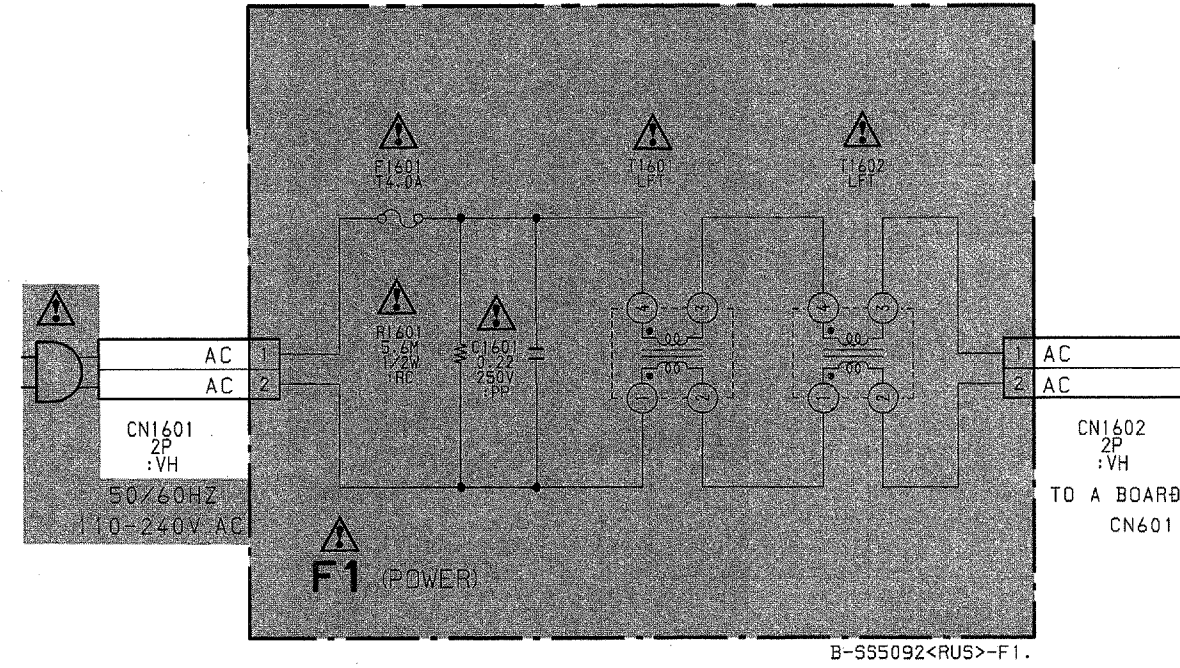
C BOARD WAVEFORMS



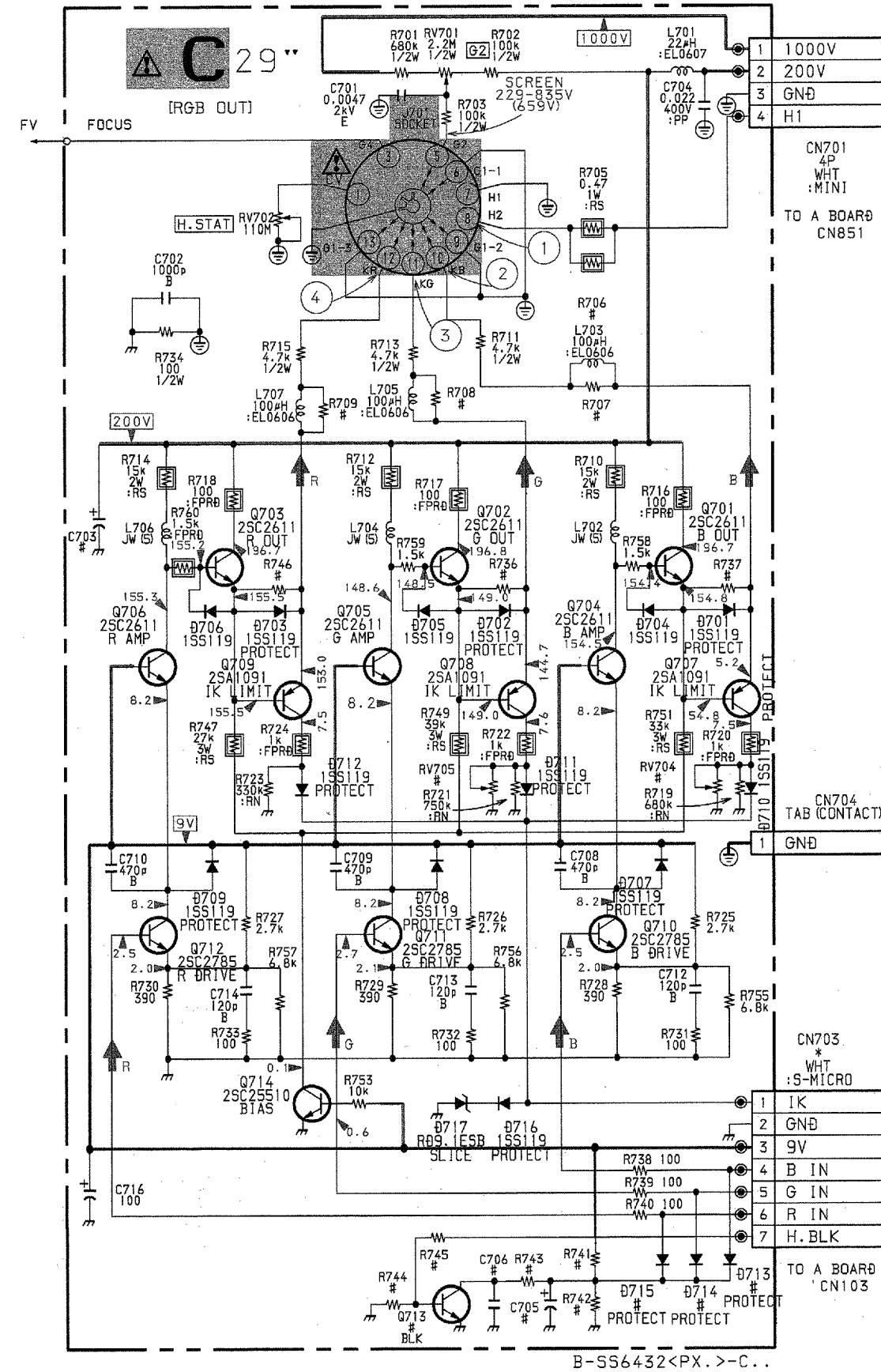
C BOARD * MARK LIST

CN703	6P
V901	M88KZT11X

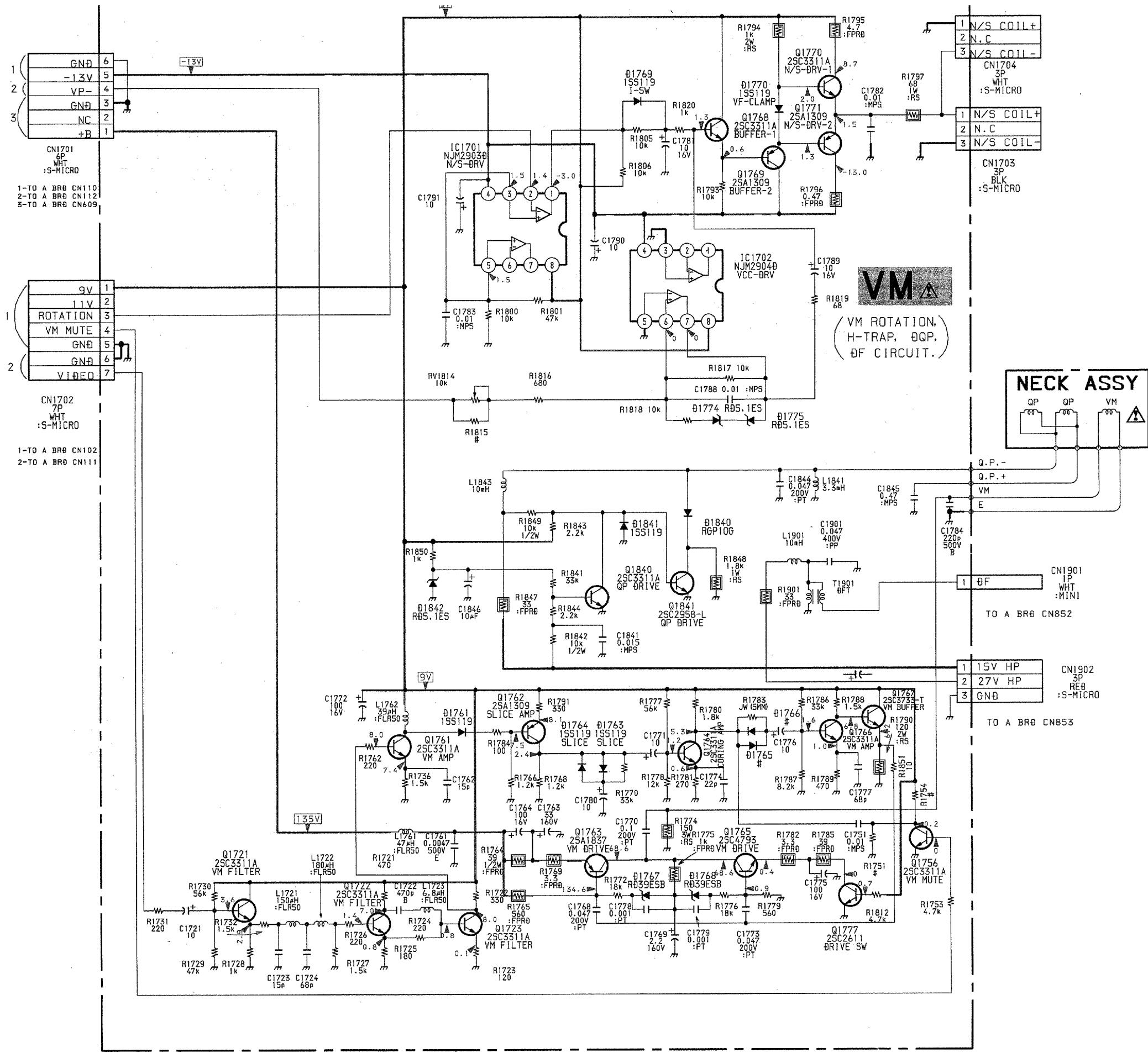
Note: The parts indicated as * in this circuit diagram are not listed here, as they are not used for this model.



B-555092<RUS>-F1.



B-556432<PX>-C.

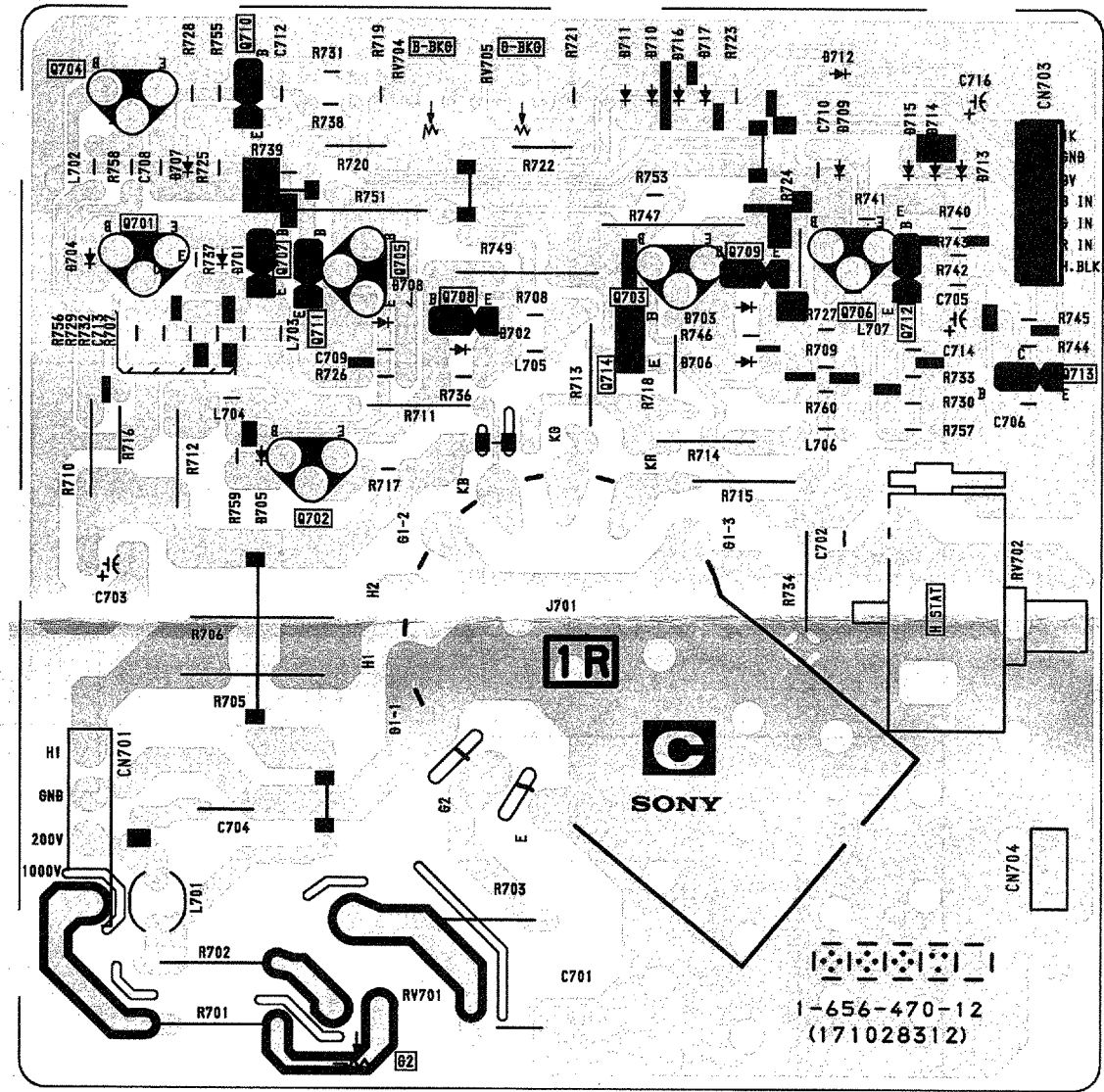


B-556432<PX>-VM.

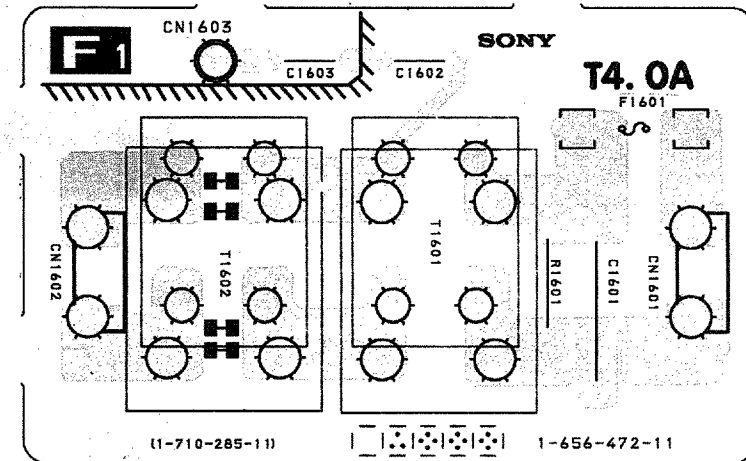
PRINTED WIRING BOARDS

C [RGB OUT] F1 [POWER] VM [VM OUT, ROTATION V-PIN OF CIRCUIT]

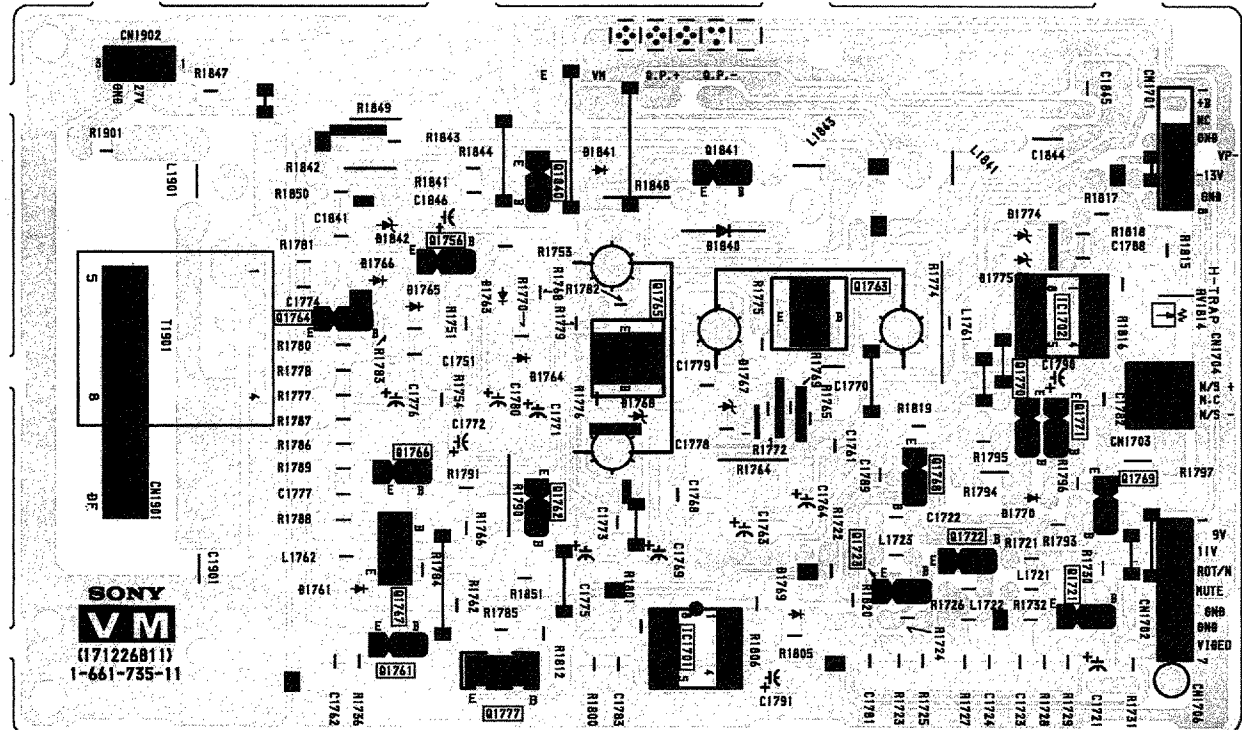
- C Board -



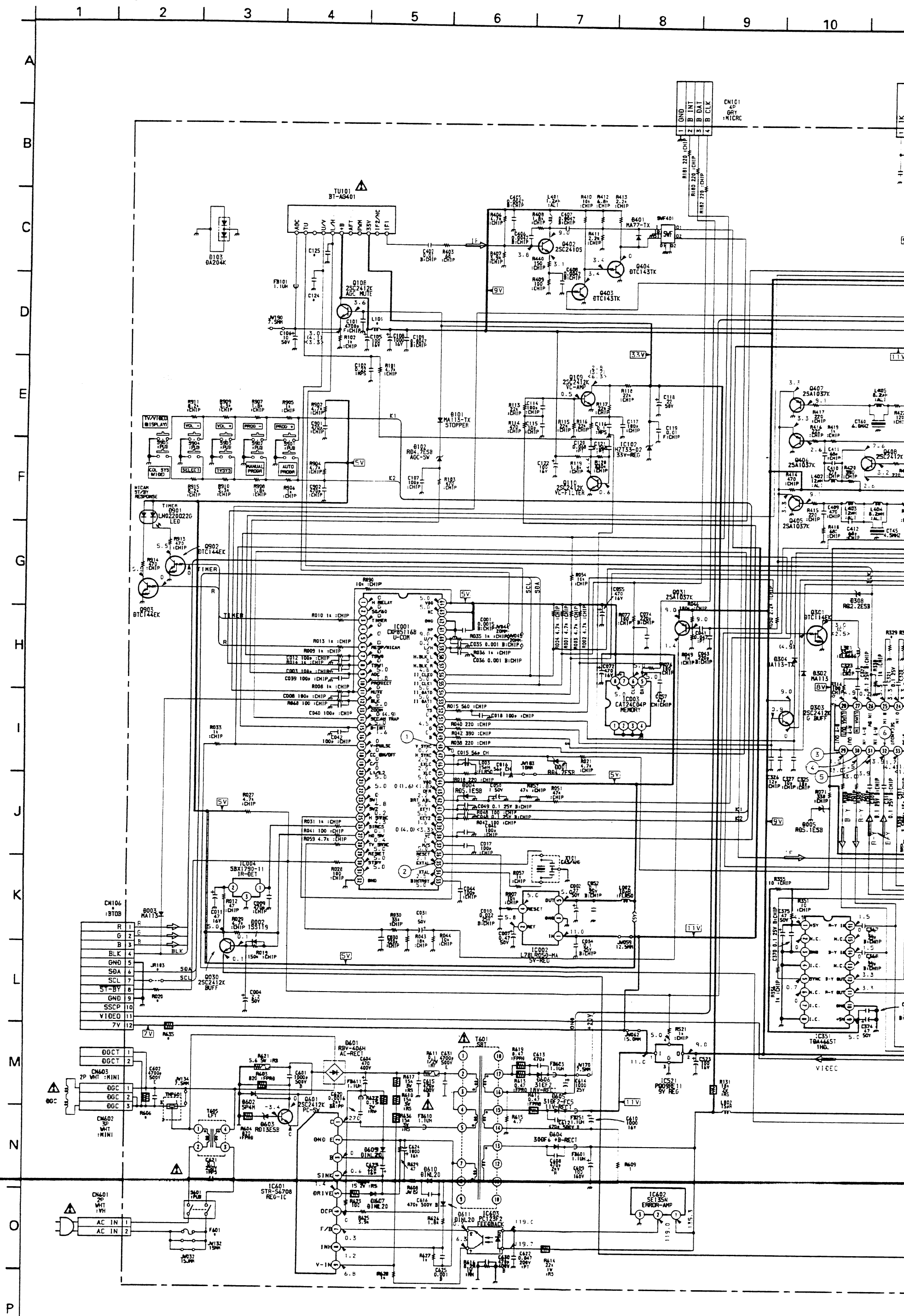
- F1 Board -

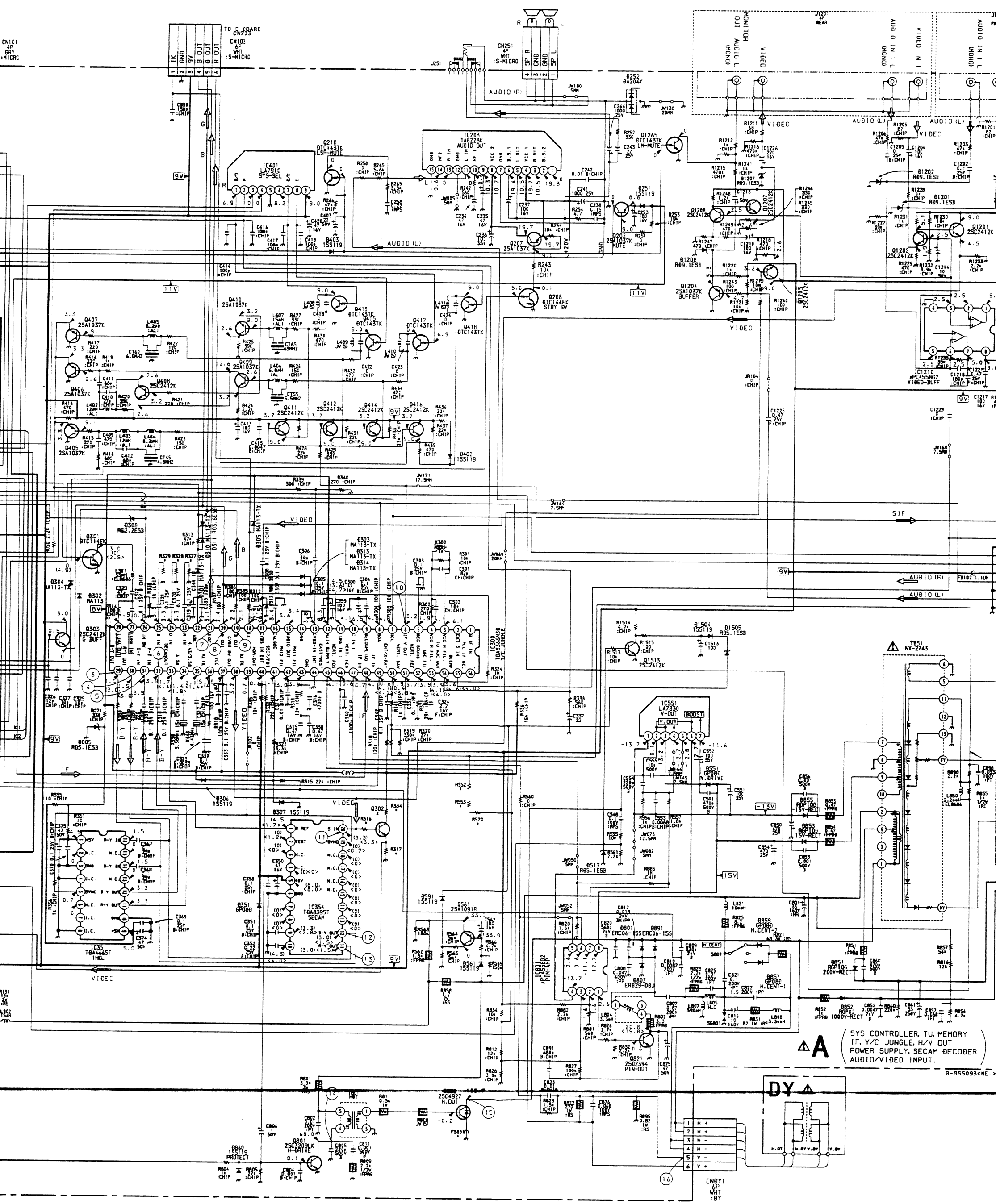


- VM Board -



(1) Schematic Diagram of A Board

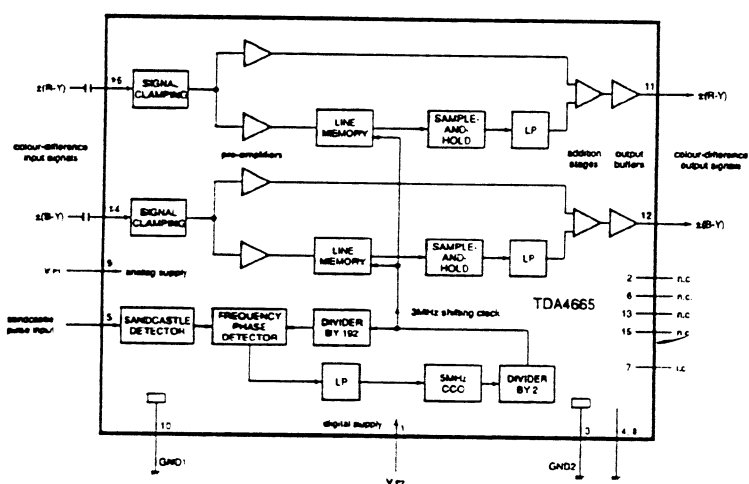




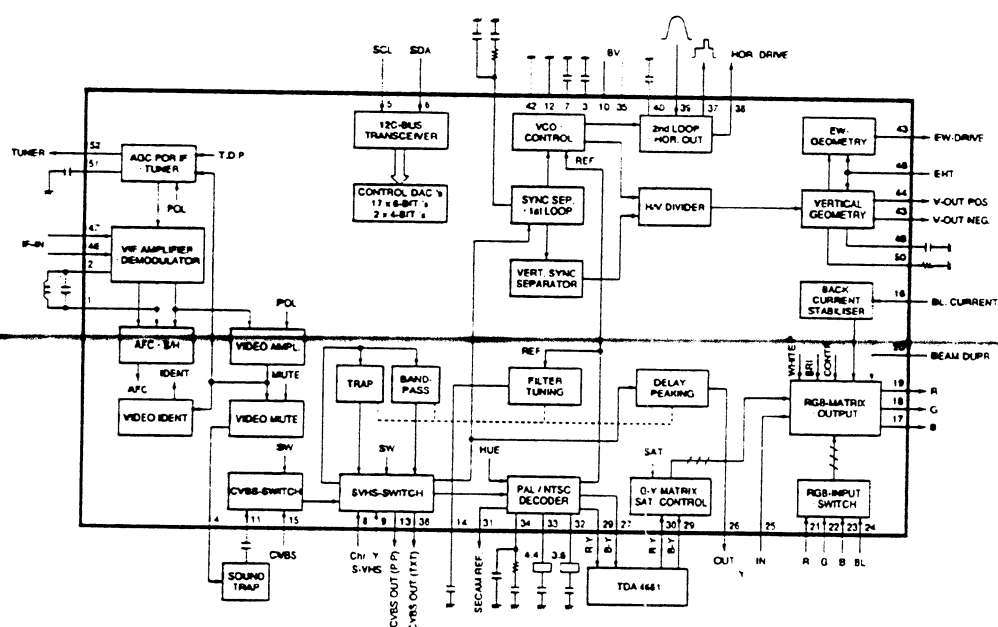
A BOARD * MARK LIST

	KV-G25M1(ME)	KV-G25M1(HK)	KV-G25M1(RUSS)	KV-G25M11
CN106	NOT USED	NOT USED	NOT USED	12P : BTOB
CN601	TO POWER CORD	TO POWER CORD	TO F1 BOARD CN1602	TO POWER CORD
F601	T3.15A	T3.15A	NOT USED	T3.15A
FB801	1.1uH	1.1uH	1.9uH	1.1uH
JR103	NOT USED	NOT USED	NOT USED	0 : CHIP
JW032	NOT USED	NOT USED	15MM	NOT USED
JW132	NOT USED	NOT USED	15MM	NOT USED
Q302	NOT USED	NOT USED	NOT USED	2SC2412K
R020	NOT USED	NOT USED	NOT USED	100 : CHIP
R316	NOT USED	NOT USED	NOT USED	4.7K : CHIP
R317	NOT USED	NOT USED	NOT USED	1K : CHIP
R327	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R328	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R329	0 : CHIP	0 : CHIP	0 : CHIP	100 : CHIP
R334	NOT USED	NOT USED	NOT USED	470 : CHIP
R552	NOT USED	NOT USED	220K : CHIP	220K : CHIP
R553	NOT USED	NOT USED	0 : CHIP	0 : CHIP
R570	NOT USED	NOT USED	0 : CHIP	0 : CHIP
R635	NOT USED	NOT USED	NOT USED	22 2W : RS

A BOARD IC351 TDA4665T



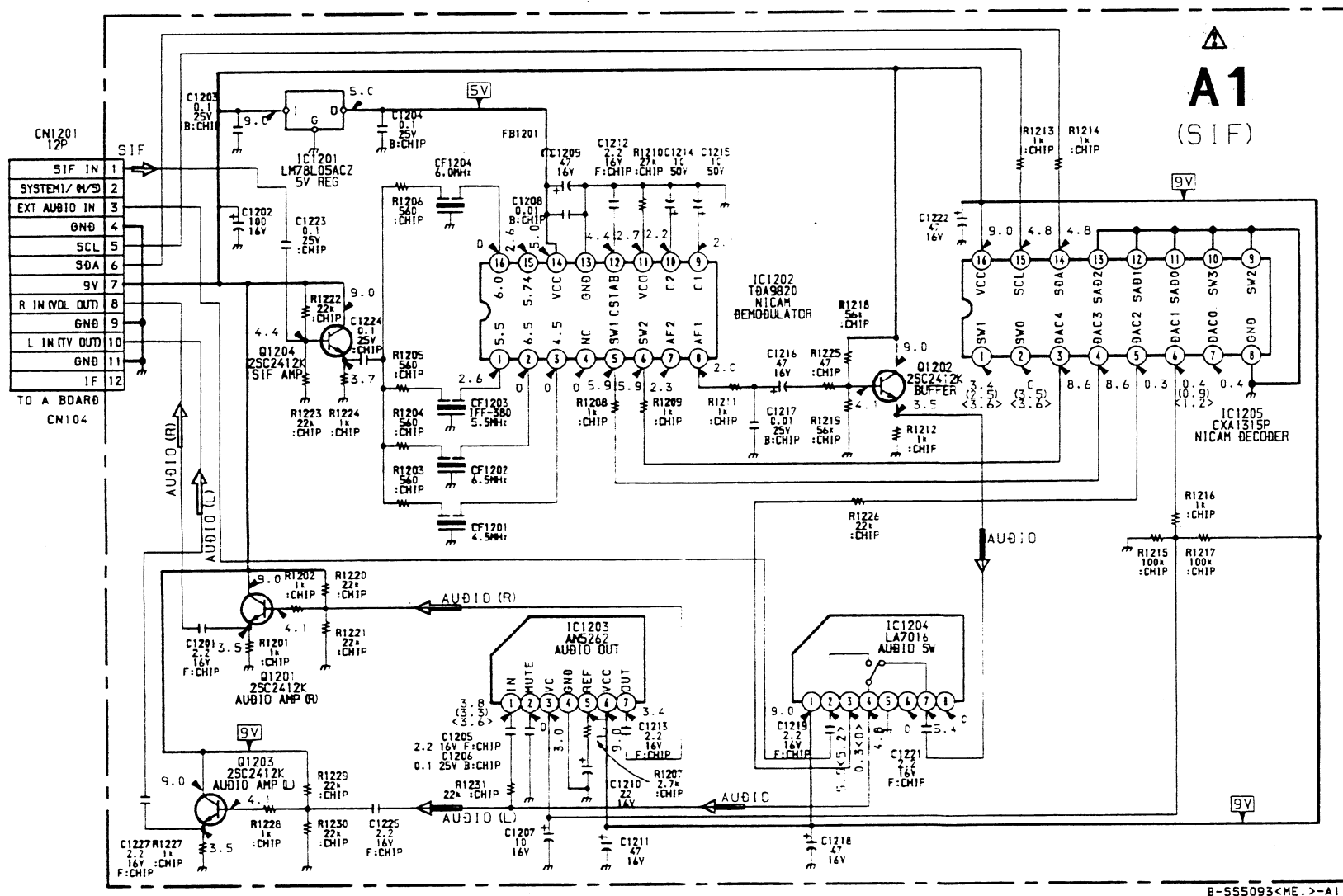
A BOARD IC300 TDA8366N3D



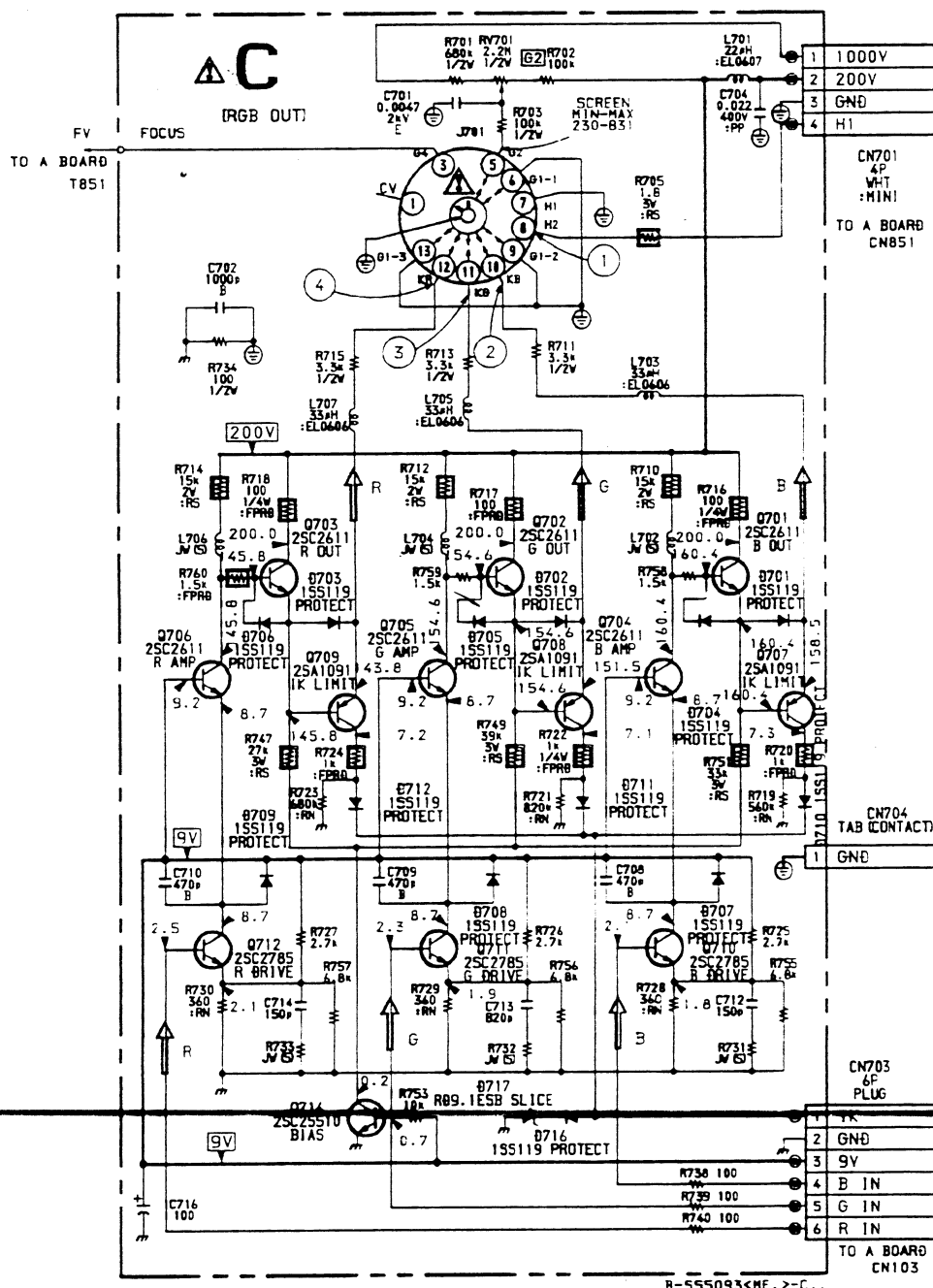
(2) Schematic Diagrams of A1, C, F1 and V1 Boards

1 2 3 4 5 6 7 8 9 10 11

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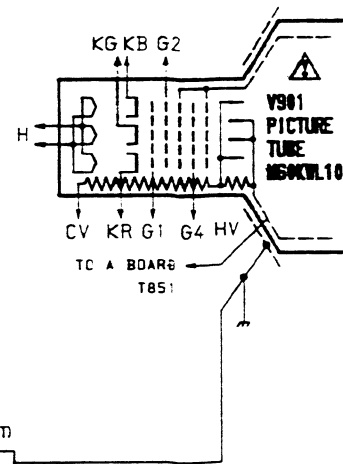
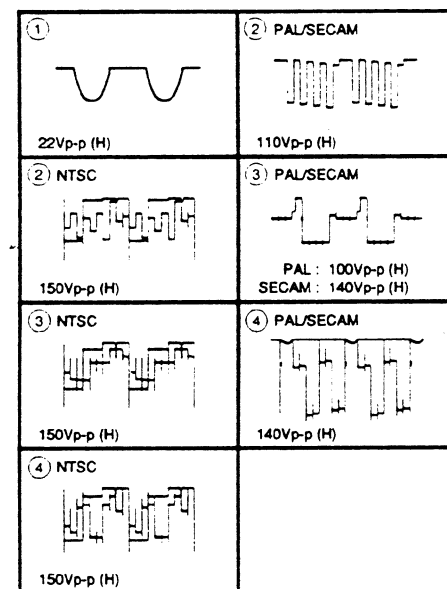


B-555093<ME.>-A1.

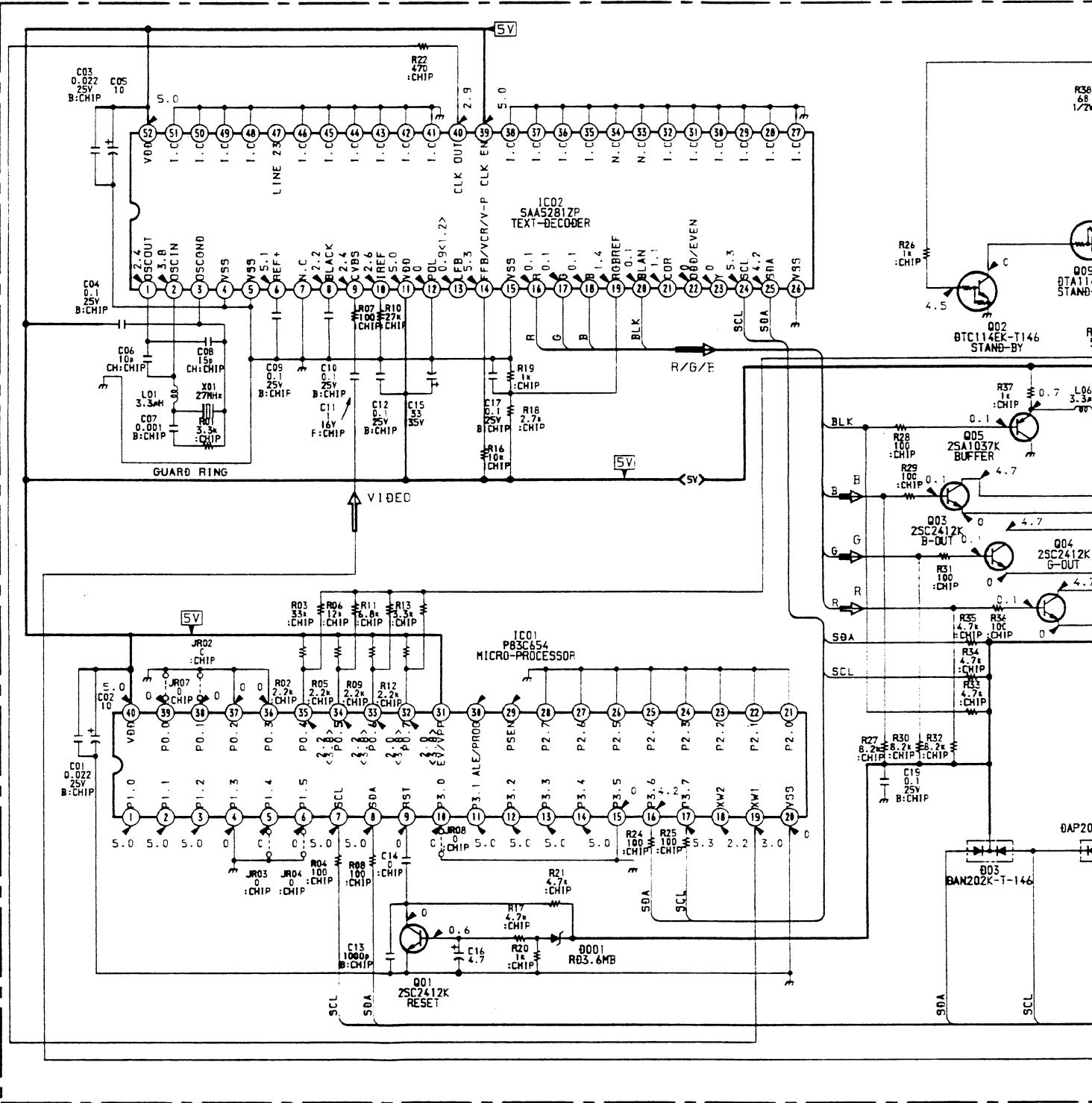
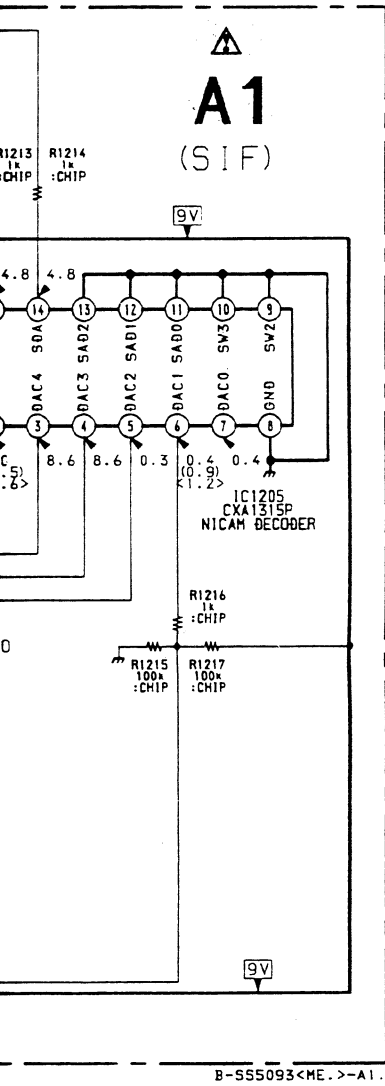


B-555093<ME.>-C.

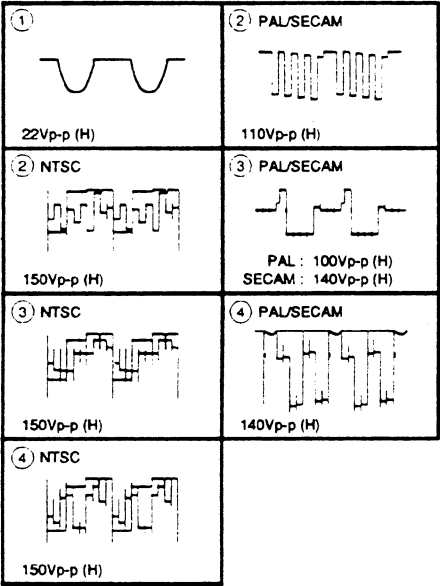
C BOARD WAVEFORMS



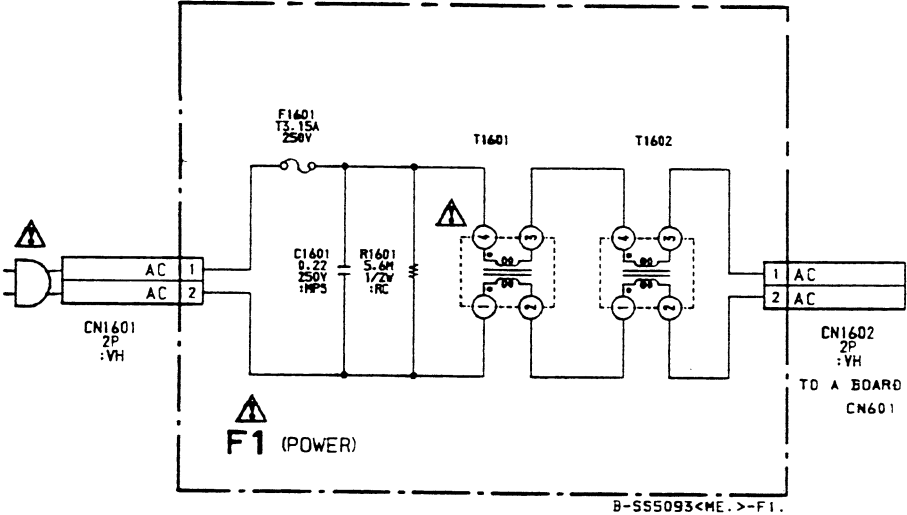
(KV-G25M11 only)



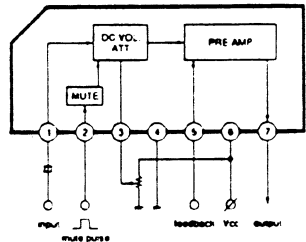
C BOARD WAVEFORMS



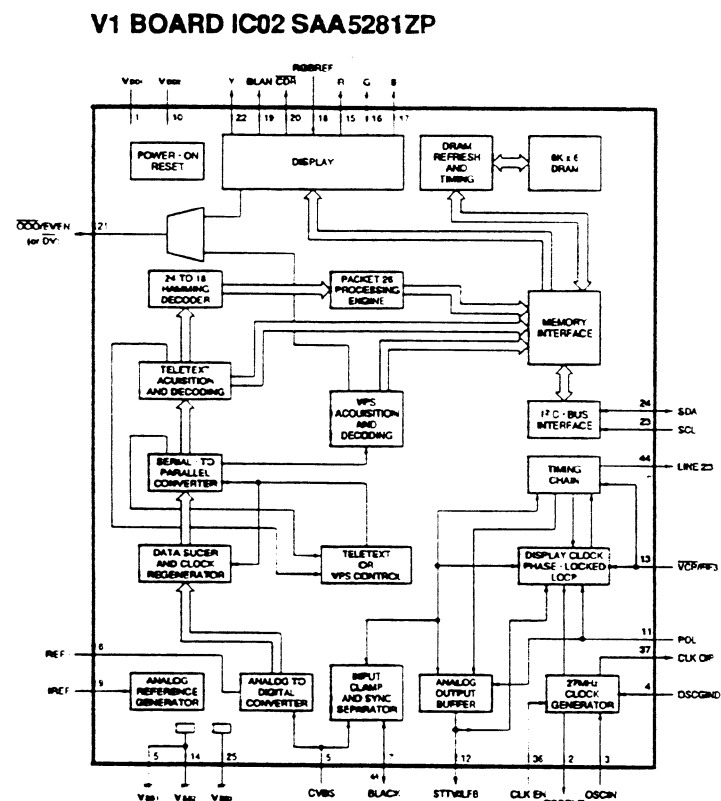
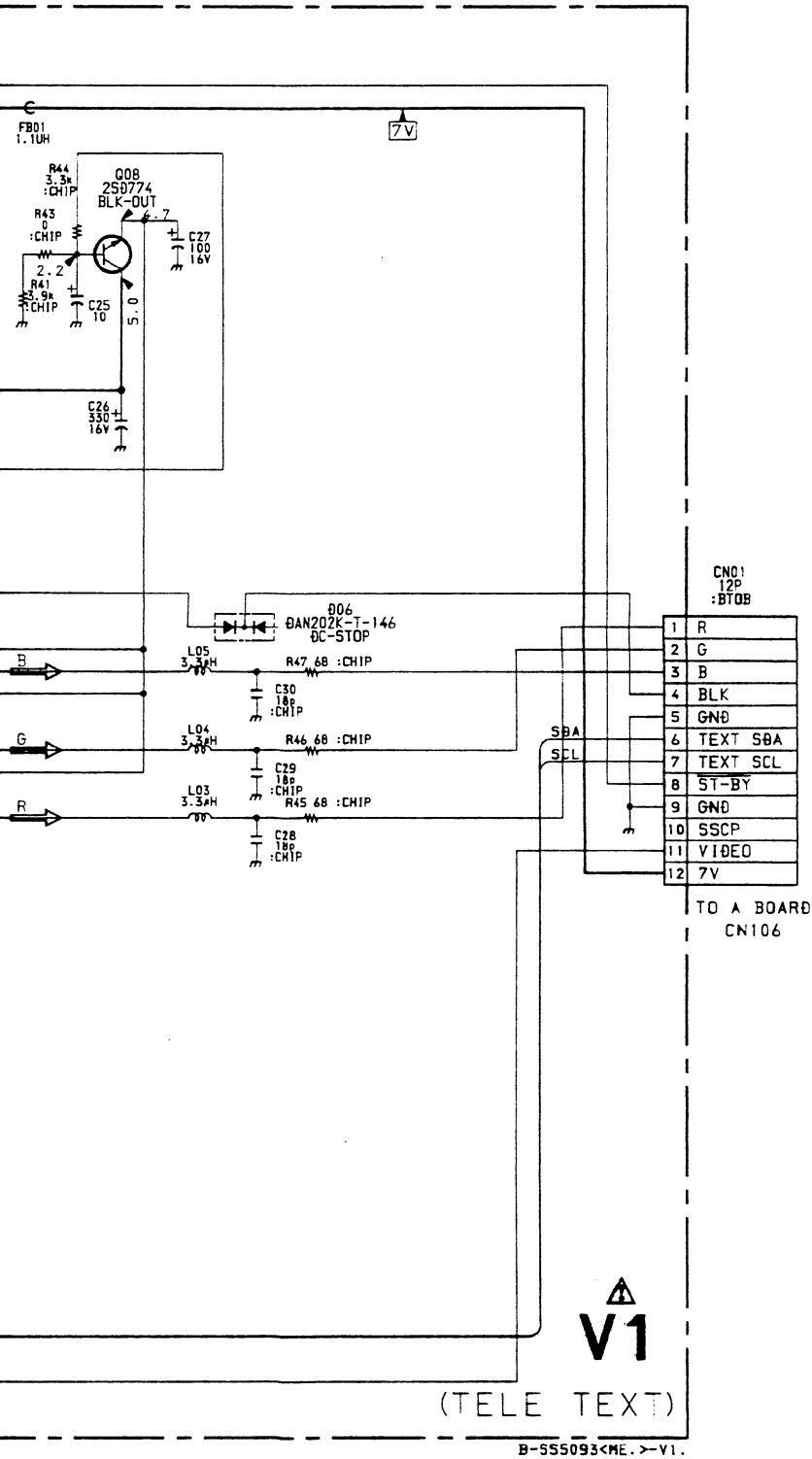
(KV-G25M1 (RUSS) only)



A1 BOARD IC1203 AN5262



The diagram illustrates the chassis layout for the Sony T3.15A. It features two main rectangular sections, CN1602 on the left and T1601 on the right. The CN1602 section contains a central component labeled T1602, surrounded by eight circular components. The T1601 section contains a central component labeled T1601, surrounded by eight circular components. Various connectors and components are labeled, including CN1603, C1602, C1601, and R1601. The diagram also shows the location of the F1 fuse and the S1 switch. The overall layout is symmetrical, with components arranged in a balanced manner.

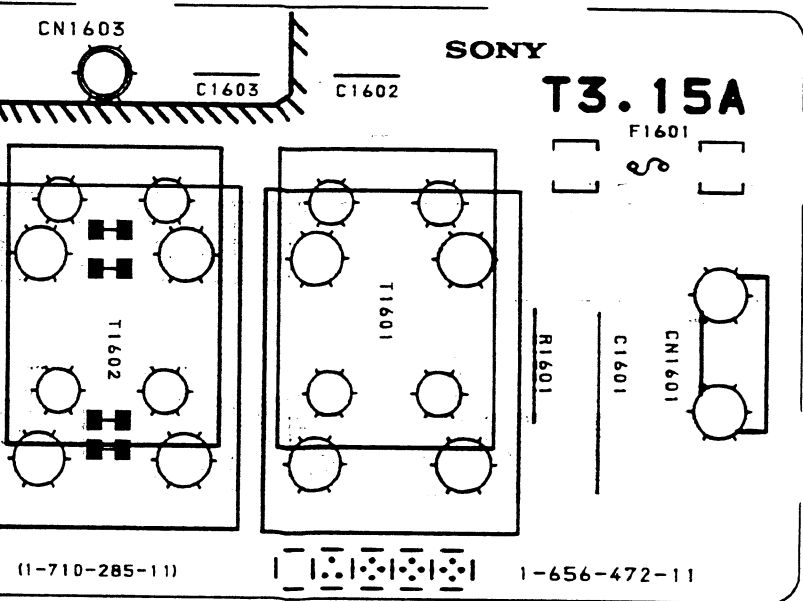


WIRING BOARD

F1

[POWER]

- (KV-G25M1 (RUSS) only)



PRINTED WIRING BOARDS

A1

[SIF]

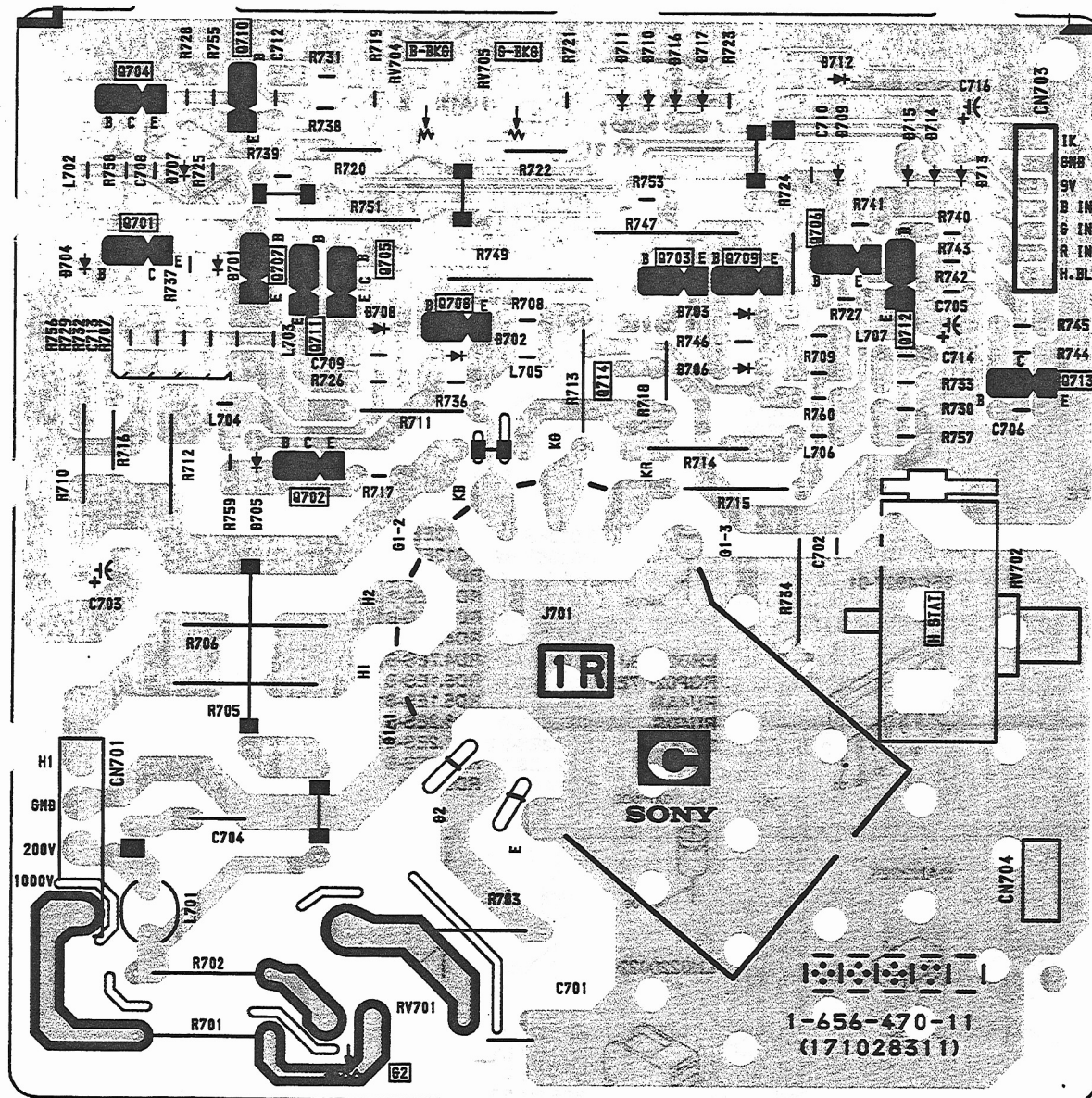
C

[RGB OUT]

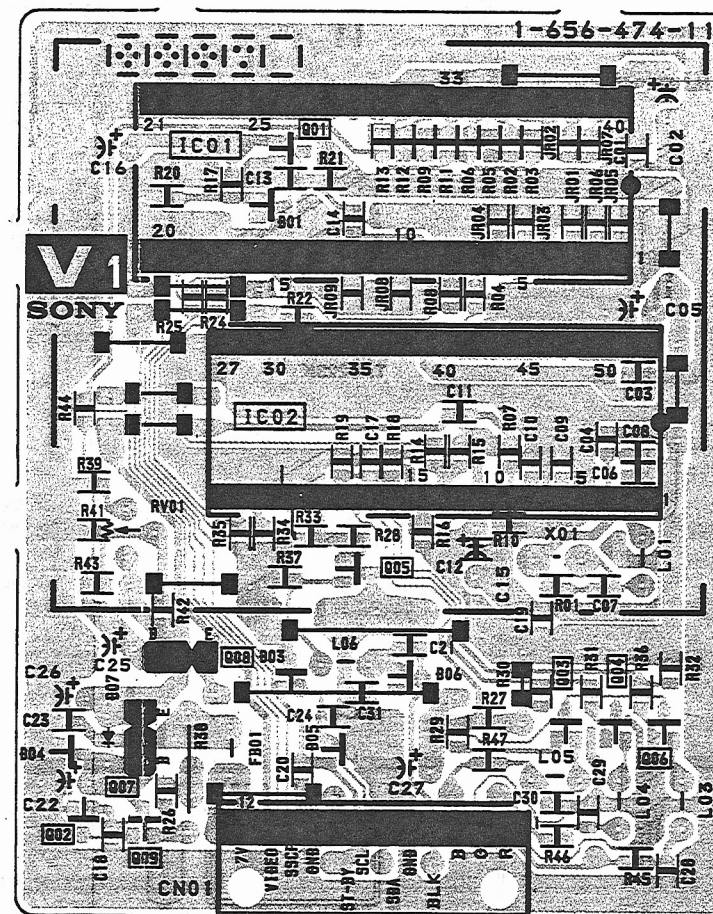
V1

[TELE TEXT]

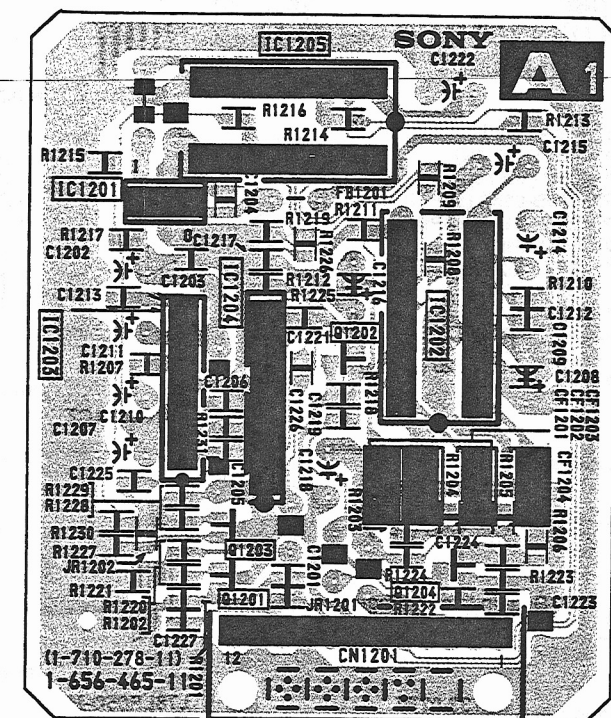
- C Board -



- V1 Board - (KV-G25M11 only)



- A1 Board -



SECTION 7
EXPLODED VIEW

KV-T21MN8/T21MN81
RM-870

KV-T21MN8/T21MN81
RM-870

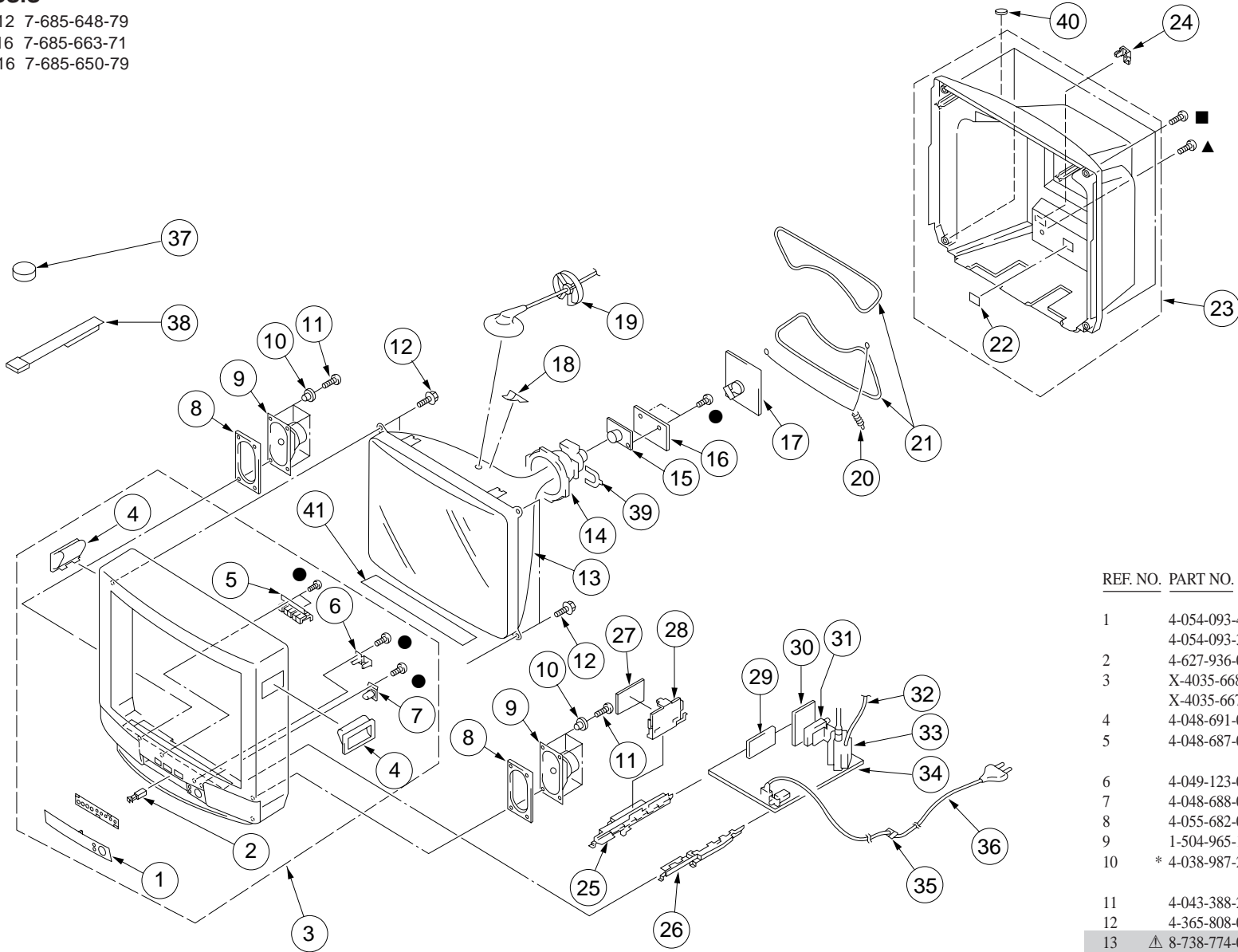
NOTE:

- Items with no part number and no description are not stocked since they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ▲ are critical for safety.
Replace only with part number specified.

7-1. CHASSIS

- : BVTP3 × 12 7-685-648-79
■: BVTP4 × 16 7-685-663-71
▲: BVTP3 × 16 7-685-650-79



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-054-093-41	DOOR, CONTROL (KV-T21MN8)	
	4-054-093-31	DOOR, CONTROL (KV-T21MN81)	
2	4-627-936-01	LOCK, MINIATURE SIDE	
3	X-4035-668-1	BEZNET ASSY (KV-T21MN8)	1, 2, 4-7
	X-4035-667-1	BEZNET ASSY (KV-T21MN81)	1, 2, 4-7
4	4-048-691-01	HANDLE	
5	4-048-687-03	BUTTON, MULTI	
6	4-049-123-01	GUIDE, LIGHT	
7	4-048-688-01	BUTTON, POWER	
8	4-055-682-01	CUSHION, SP	
9	1-504-965-11	SPEAKER (12X5CM)	
10	* 4-038-987-21	CUSHION, SPEAKER	
11	4-043-388-21	SCREW, STEP TAPPING	
12	4-365-808-01	SCREW (5), TAPPING	
13	▲ 8-738-774-05	PICTURE TUBE (A51JUH71X)	
14	8-451-280-33	DEFLECTION YOKE (Y21PXA2) (KV-T21MN8)	
	8-451-280-81	DEFLECTION YOKE (Y21PXA2-S3) (KV-T21MN81)	
15	1-452-509-51	NECK ASSY, CRT (NA308)	
16	* A-1342-395-A	VM BOARD, BOARD	
17	* A-1331-577-A	C BOARD, COMPLETE	
18	4-060-267-01	SPACER, DY	
19	* 4-047-349-01	HOLDER, HV CABLE	
20	4-369-318-81	SPRING, TENSION	
21	▲ 1-409-942-11	COIL, DEMAGNETIZATION	
22	4-054-094-01	SHEET, BLIND	

REF. NO.	PART NO.	DESCRIPTION	REMARK
23	▲ X-4033-682-1	COVER ASSY, REAR	22
24	4-049-130-01	CLAMPER, CORD	
25	* 4-048-690-02	RAIL (L), GUIDE	
26	* 4-048-689-02	RAIL (R), GUIDE	
27	* A-1241-325-A	F1 BOARD, COMPLETE (KV-T21MN8 ONLY)	
28	* 4-049-158-01	BRACKET, F1 PC BOARD (KV-T21MN8 ONLY)	
29	* A-1347-117-A	V1 BOARD, COMPLETE (KV-T21MN81 ONLY)	
30	* A-1297-751-A	A3 BOARD, COMPLETE	
31	▲ 8-598-323-30	TUNER, VSS BT-AG401 (KV-T21MN8)	
	8-598-323-30	TUNER, VSS BT-AG401 (KV-T21MN81)	
32	▲ 1-900-700-05	LEAD ASSY, FOCUS	
33	▲ 1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742/M3A)	
34	* A-1298-597-A	A BOARD, COMPLETE (KV-T21MN8)	
	* A-1298-596-A	A BOARD, COMPLETE (KV-T21MN81)	
35	▲ 4-389-778-11	HOLDER, AC CORD	
36	▲ 1-769-609-21	CORD, POWER (WITH CONNECTOR) (KV-T21MN8)	
	▲ 1-574-062-61	CORD, POWER (WITH CONNECTOR) 2.5A/250V (KV-T21MN81)	
37	1-452-032-00	MAGNET, DISC	
38	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
39	1-452-277-00	MAGNET, BMC	
40	4-038-462-01	CAP, ANTENNA	
41	4-372-556-31	SHEET, BLOTTING	

SECTION 8
ELECTRICAL PARTS LIST



NOTE:

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

- All resistors are in ohms
- F : nonflammable

CAPACITORS

- MF : μF, PF : μμF

COILS

- MMH : mH, UH : μH

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
* A-1298-597-A	A BOARD, COMPLETE (KV-T21MN8) *****			C049	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
* A-1298-596-A	A BOARD, COMPLETE (KV-T21MN81) *****			C050	1-124-903-11	ELECT 1MF 20% 50V	
1-533-223-11	CLIP, FUSE (KV-T21MN81 ONLY)			C051	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
* 1-580-798-11	CONNECTOR PIN (DY) 6P			C052	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
4-382-854-11	SCREW (M3X10), P, SW (+)			C053	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
	<CAPACITOR>			C054	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C001	1-163-011-11	CERAMIC CHIP 0.0015MF 10% 50V		C055	1-126-941-11	ELECT 470MF 20% 16V	
C002	1-126-965-11	ELECT 22MF 20% 50V		C056	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C003	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C057	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C004	1-126-961-11	ELECT 2.2MF 20% 50V		C058	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C007	1-124-902-00	ELECT 0.47MF 20% 50V		C059	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C008	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C060	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C009	1-163-133-00	CERAMIC CHIP 470PF 5% 50V		C061	1-164-505-11	CERAMIC CHIP 2.2MF 16V	
C010	1-163-037-11	CERAMIC CHIP 0.022MF 10% 50V		C072	1-126-941-11	ELECT 470MF 20% 16V	
C011	1-104-664-11	ELECT 47MF 20% 16V		C074	1-163-001-11	CERAMIC CHIP 220PF 10% 50V	
C012	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C101	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C013	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C103	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C014	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C105	1-104-665-11	ELECT 100MF 20% 16V	
C015	1-101-884-00	CERAMIC 56PF 5% 50V		C106	1-124-907-11	ELECT 10MF 20% 50V	
C016	1-101-884-00	CERAMIC 56PF 5% 50V		C108	1-126-942-61	ELECT 1000MF 20% 16V	
C017	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C109	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C018	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C110	1-136-165-00	FILM 0.1MF 5% 50V	
C019	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C111	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C020	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C114	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C021	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C115	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
C022	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C116	1-136-165-00	FILM 0.1MF 5% 50V	
C023	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C117	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C024	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C118	1-126-965-11	ELECT 22MF 20% 50V	
C025	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C119	1-163-059-00	CERAMIC CHIP 0.01MF 50V	
C026	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C120	1-130-493-00	MYLAR 0.068MF 5% 50V	
C027	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C121	1-130-493-00	MYLAR 0.068MF 5% 50V	
C028	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C122	1-104-665-11	ELECT 100MF 20% 16V	
C029	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C124	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C034	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C125	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C035	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C127	1-163-077-00	CERAMIC CHIP 0.1MF 10% 25V	
C036	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V		C128	1-163-077-00	CERAMIC CHIP 0.1MF 10% 25V	
C037	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C132	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C038	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C201	1-126-960-11	ELECT 1MF 20% 50V	
C040	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C202	1-126-933-11	ELECT 100MF 20% 16V	
C042	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C202	1-104-665-11	ELECT 100MF 20% 16V	
C044	1-163-117-00	CERAMIC CHIP 100PF 5% 50V				(KV-T21MN81)	
C045	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C203	1-126-960-11	ELECT 1MF 20% 50V	
C046	1-163-117-00	CERAMIC CHIP 100PF 5% 50V		C204	1-126-933-11	ELECT 100MF 20% 16V	
C047	1-163-117-00	CERAMIC CHIP 100PF 5% 50V				(KV-T21MN8)	
C048	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V		C204	1-104-665-11	ELECT 100MF 20% 16V	
						(KV-T21MN81)	
				C205	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V	
				C206	1-163-018-00	CERAMIC CHIP 0.0056MF 10% 50V	
				C207	1-126-961-11	ELECT 2.2MF 20% 50V	

REF. NO.	PART NO.	DESCRIPTION	REMARK
C208	1-126-961-11	ELECT 2.2MF 20% 50V	
C209	1-163-018-00	CERAMIC CHIP 0.0056MF 10% 50V	
C210	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V	
C211	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C233	1-126-967-11	ELECT 47MF 20% 16V	
C234	1-104-664-11	ELECT 47MF 20% 16V	
C235	1-104-665-11	ELECT 100MF 20% 16V	
C236	1-126-968-11	ELECT 100MF 20% 35V	
C237	1-104-665-11	ELECT 100MF 20% 16V	
C238	1-137-188-51	FILM 0.15MF 5% 50V	
C239	1-126-933-11	ELECT 100MF 20% 16V	
C239	1-104-665-11	ELECT 100MF 20% 16V	
C240	1-137-188-51	FILM 0.15MF 5% 50V	
C241	1-124-557-11	ELECT 1000MF 20% 25V	
C242	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C243	1-124-907-11	ELECT 10MF 20% 50V	
C244	1-124-557-11	ELECT 1000MF 20% 25V	
C246	1-128-551-11	ELECT 22MF 20% 25V	
C247	1-126-942-61	ELECT 1000MF 20% 25V	
C253	1-104-665-11	ELECT 100MF 20% 16V	
C257	1-136-169-00	FILM 0.22MF 5% 50V	
C258	1-136-169-00	FILM 0.22MF 5% 50V	
C300	1-104-664-11	ELECT 47MF 20% 16V	
C304	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C305	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C306	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C306	1-216-295-91	SHORT 0 (KV-T21MN81)	
C307	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C308	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C309	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C310	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C311	1-163-231-11	CERAMIC CHIP 15PF 5% 50V	
C312	1-163-231-11	CERAMIC CHIP 15PF 5% 50V	
C313	1-104-665-11	ELECT 100MF 20% 16V	
C314	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	
C315	1-165-320-11	CERAMIC CHIP 0.47MF 10% 16V	
C316	1-102-125-00	CERAMIC 0.0047MF 10% 50V	
C319	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C320	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C321	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C322	1-216-295-91	SHORT 0	
C323	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C324	1-115-565-11	CERAMIC CHIP 2.2MF 10% 10V	
C325	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
C326	1-163-095-00	CERAMIC CHIP 12PF 5% 50V	
C327	1-163-093-00	CERAMIC CHIP 10PF 5% 50V	
C328	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C329	1-163-016-00	CERAMIC CHIP 0.0039MF 10% 50V	
C330	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C331	1-124-907-11	ELECT 10MF 20% 50V	
C332	1-136-165-00	FILM 0.1MF 5% 50V	
C333	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C334	1-164-182-11	CERAMIC CHIP 0.0033MF 10% 50V	
C335	1-102-973-00	CERAMIC 100PF 5% 50V	
C336	1-124-907-11	ELECT 10MF 20% 50V	
C337	1-104-665-11	ELECT 100MF 20% 16V	
C338	1-165-320-11	CERAMIC CHIP 0.47MF 10% 16V	

REF. NO.	PART NO.	DESCRIPTION	REMARK
C339	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C340	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C341	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C342	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C344	1-124-907-11	ELECT 10MF 20% 50V	
C349	1-124-907-11	ELECT 10MF 20% 50V	
C350	1-126-967-11	ELECT 47MF 20% 16V	
C351	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C352	1-164-489-11	CERAMIC CHIP 0.22MF 10% 16V	
C358	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C359	1-104-665-11	ELECT 100MF 20% 16V	
C361	1-163-009-11	CERAMIC CHIP 0.001MF 10% 50V	
C362	1-163-105-00	CERAMIC CHIP 33PF 5% 50V	
C367	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C368	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C369	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C370	1-164-004-11	CERAMIC CHIP 0.1MF 10% 25V	
C374	1-124-910-11	ELECT 47MF 20% 50V	
C376	1-164-005-11	CERAMIC CHIP 0.47MF 25V	
C401	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C402	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C403	1-126-965-11	ELECT 22MF 20% 50V	
C404	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C405	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C406	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C407	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C408	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C409	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
C410	1-163-103-00	CERAMIC CHIP 27PF 5% 50V	
C411	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C412	1-163-113-00	CERAMIC CHIP 68PF 5% 50V	
C413	1-104-665-11	ELECT 100MF 20% 16V	
C414	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C415	1-163-017-00	CERAMIC CHIP 0.0047MF 10% 50V	
C416	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C417	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C418	1-216-295-91	SHORT 0	
C419	1-163-117-00	CERAMIC CHIP 100PF 5% 50V	
C420	1-104-664-11	ELECT 47MF 20% 16V	
C422	1-216-295-91	SHORT 0	
C423	1-216-295-91	SHORT 0	
C424	1-216-295-91	SHORT 0	
C425	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	
C501	1-102-228-00	CERAMIC 470PF 10% 500V	
C523	1-104-665-11	ELECT 100MF 20% 16V	
C548	1-106-220-00	MYLAR 0.1MF 10% 100V	
C551	1-126-968-11	ELECT 100MF 20% 35V	
C552	1-126-968-11	ELECT 100MF 20% 35V	
C553	1-163-019-00	CERAMIC CHIP 0.0068MF 10% 50V	
C554	1-102-244-00	CERAMIC 220PF 10% 500V	
C554	1-102-228-00	CERAMIC 470PF 10% 500V	
C555	1-101-804-00	CERAMIC 10PF 5% 500V	
C562	1-104-665-11	ELECT 100MF 20% 16V	
C602	1-161-830-00	CERAMIC 0.0047MF 99% 500V	
C603	1-161-830-00	CERAMIC 0.0047MF 99% 500V	
C604	1-117-752-11	ELECT(BLOCK) 330MF 20% 450V	
C605	1-161-830-00	CERAMIC 0.0047MF 99% 500V	

The components identified by shading
and mark \triangle are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C606	1-161-830-00	CERAMIC	0.0047MF 99% 500V	C1202	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C607	1-161-830-00	CERAMIC	0.0047MF 99% 500V	C1203	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C608	1-104-332-11	CERAMIC	470PF 10% 2KV	C1204	1-126-933-11	ELECT	100MF 20% 16V
C609	1-123-024-21	ELECT	33MF 160V			(KV-T21MN8)	
C610	1-126-943-11	ELECT	2200MF 20% 25V	C1204	1-104-665-11	ELECT	100MF 20% 16V
C611 \triangle	1-113-900-51	CERAMIC	470PF 10% 250V			(KV-T21MN81)	
C612	1-102-228-00	CERAMIC	470PF 10% 500V	C1205	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C613	1-102-824-00	CERAMIC	470PF 5% 50V	C1206	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C614	1-126-943-11	ELECT	2200MF 20% 25V	C1210	1-126-933-11	ELECT	100MF 20% 16V
C616	1-102-228-00	CERAMIC	470PF 10% 500V			(KV-T21MN8)	
C618	1-163-133-00	CERAMIC CHIP	470PF 5% 50V	C1210	1-104-665-11	ELECT	100MF 20% 16V
C619	1-162-116-00	CERAMIC	680PF 10% 2KV			(KV-T21MN81)	
C621 \triangle	1-104-705-51	FILM	0.1MF 20% 250V	C1212	1-126-960-11	ELECT	1MF 20% 50V
C622	1-106-383-00	MYLAR	0.047MF 10% 200V	C1213	1-126-960-11	ELECT	1MF 20% 50V
C623	1-104-666-11	ELECT	220MF 20% 16V	C1214	1-126-964-11	ELECT	10MF 20% 50V
C624	1-126-942-61	ELECT	1000MF 20% 16V	C1215	1-163-123-00	CERAMIC CHIP	180PF 5% 50V
C625	1-102-074-00	CERAMIC	0.001MF 10% 50V	C1216	1-164-005-11	CERAMIC CHIP	0.47MF 25V
C627	1-162-116-00	CERAMIC	680PF 10% 2KV	C1217	1-126-933-11	ELECT	100MF 20% 16V
C628	1-163-133-00	CERAMIC CHIP	470PF 5% 50V			(KV-T21MN8)	
C630 \triangle	1-113-900-51	CERAMIC	470PF 10% 250V	C1217	1-104-665-11	ELECT	100MF 20% 16V
C631	1-161-830-00	CERAMIC	0.0047MF 99% 500V			(KV-T21MN81)	
C632 \triangle	1-113-900-51	CERAMIC	470PF 10% 250V	C1218	1-163-123-00	CERAMIC CHIP	180PF 5% 50V
C633	1-161-754-00	CERAMIC	0.001MF 10% 3KV	C1219	1-126-933-11	ELECT	100MF 20% 16V
C634	1-163-133-00	CERAMIC CHIP	470PF 5% 50V	C1221	1-164-005-11	CERAMIC CHIP	0.47MF 25V
C801	1-123-024-21	ELECT	33MF 160V	C1222	1-164-005-11	CERAMIC CHIP	0.47MF 25V
C802	1-107-364-11	MYLAR	0.01MF 10% 200V	C1223	1-164-346-11	CERAMIC CHIP	1MF 16V
C804	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	C1224	1-216-295-91	SHORT	0
C805	1-102-244-00	CERAMIC	220PF 10% 500V	C1225	1-164-005-11	CERAMIC CHIP	0.47MF 25V
C806	1-124-903-11	ELECT	1MF 20% 50V	C1226	1-126-934-11	ELECT	220MF 20% 16V
C807	1-136-569-11	FILM	1.2MF 5% 200V	C1228	1-164-346-11	CERAMIC CHIP	1MF 16V
C808	1-129-746-00	FILM	0.039MF 5% 400V	C1513	1-124-122-11	ELECT	100MF 20% 50V
C809	1-162-115-00	CERAMIC	330PF 10% 2KV			<CONNECTOR>	
C810	1-106-365-00	MYLAR	0.0082MF 99% 200V	CN101 *	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P	
C811	1-162-318-11	CERAMIC	0.001MF 10% 500V	CN102 *	1-564-508-11	PLUG, CONNECTOR 5P	
C812	1-136-081-00	FILM	0.012MF 3% 2KV	CN103 *	1-564-509-11	PLUG, CONNECTOR 6P	
C816	1-107-636-11	ELECT	10MF 20% 160V	CN106 *	1-770-747-11	CONNECTOR, BOARD TO BOARD 12P	
C820	1-161-754-00	CERAMIC	0.001MF 10% 2KV			(KV-T21MN81 ONLY)	
C821	1-104-999-11	MYLAR	0.1MF 10% 200V	CN111 *	1-564-505-11	PLUG, CONNECTOR 2P	
C822	1-136-111-00	FILM	1MF 5% 200V	CN251 *	1-564-507-11	PLUG, CONNECTOR 4P	
C823	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	CN601 *	1-580-843-11	PIN, CONNECTOR (POWER)	
C825	1-107-364-11	MYLAR	0.01MF 10% 200V	CN602 *	1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P	
C850	1-124-480-11	ELECT	470MF 20% 25V	CN604	1-695-915-11	TAB (CONTACT)	
C852	1-104-574-11	CERAMIC	0.0047MF 10% 2KV	CN605	1-695-915-11	TAB (CONTACT)	
C853	1-162-318-11	CERAMIC	0.001MF 10% 500V	CN606	1-695-915-11	TAB (CONTACT)	
C854	1-124-480-11	ELECT	470MF 20% 25V	CN607	1-695-915-11	TAB (CONTACT)	
C856	1-162-318-11	CERAMIC	0.001MF 10% 500V	CN609 *	1-564-506-11	PLUG, CONNECTOR 3P	
C857	1-136-159-00	FILM	0.033MF 5% 50V	CN612	1-695-915-11	TAB (CONTACT)	
C860	1-102-228-00	CERAMIC	470PF 10% 500V	CN613	1-695-915-11	TAB (CONTACT)	
C861	1-107-654-11	ELECT	33MF 20% 250V	CN614	1-695-915-11	TAB (CONTACT)	
C875	1-128-562-11	ELECT	47MF 20% 100V	CN615	1-695-915-11	TAB (CONTACT)	
C876	1-107-369-11	MYLAR	0.068MF 10% 100V	CN851 *	1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P	
C891	1-163-007-11	CERAMIC CHIP	680PF 10% 50V			<TRIMMER>	
C898	1-137-150-11	MYLAR	0.01MF 10% 100V	CT45	1-579-690-11	TRAP, CERAMIC	
C901	1-163-133-00	CERAMIC CHIP	470PF 5% 50V	CT55	1-404-801-11	TRAP, CERAMIC	
C902	1-163-133-00	CERAMIC CHIP	470PF 5% 50V	CT60	1-409-429-11	TRAP, CERAMIC	
C1201	1-126-933-11	ELECT	100MF 20% 16V	CT65	1-409-327-00	TRAP, CERAMIC (6.5MHZ)	
		(KV-T21MN8)					
C1201	1-104-665-11	ELECT	100MF 20% 16V				
		(KV-T21MN81)					



The components identified by shading and mark \triangle are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<DIODE>				<FERRITE BEAD>			
D001	8-719-109-81	DIODE RD4.7ESB2		FB101	1-410-397-21	FERRITE 1.1UH	
D002	8-719-911-19	DIODE 1SS119-25		FB102	1-410-397-21	FERRITE 1.1UH	
D003	8-719-041-97	DIODE MA113-(TX)		FB103	1-410-397-21	FERRITE 1.1UH	
D005	8-719-109-84	DIODE RD5.1ESB1		FB251	1-410-397-21	FERRITE 1.1UH	
D008	8-719-109-89	DIODE RD5.6ESB2		FB601	1-410-397-21	FERRITE 1.1UH	
D103	8-719-914-42	DIODE DA204K		FB603	1-410-397-21	FERRITE 1.1UH	
D251	8-719-911-19	DIODE 1SS119-25		FB610	1-410-397-21	FERRITE 1.1UH	
D252	8-719-914-42	DIODE DA204K		FB612	1-410-397-21	FERRITE 1.1UH	
D301	8-719-041-97	DIODE MA113-(TX)		FB801	1-410-397-21	FERRITE 1.1UH	
D305	8-719-041-97	DIODE MA113-(TX)					
D306	8-719-911-19	DIODE 1SS119-25		<IC>			
D307	8-719-911-19	DIODE 1SS119-25		IC001	8-752-893-68	IC CXP85224A-062S	
D308	8-719-109-54	DIODE RD2.2ESB2		IC002	8-759-805-37	IC L78LR05D-MA	
D310	8-719-041-97	DIODE MA113-(TX)		IC003	8-759-370-33	IC ST24C04FB6	
D311	8-719-109-54	DIODE RD2.2ESB2		IC004	8-742-041-12	HYB IC SBX1981-11(12)	
D312	8-719-110-08	DIODE RD8.2ESB2		IC201	8-759-090-21	IC TDA8424	
D315	8-719-121-24	DIODE RD9.1ESL					
D351	8-719-908-03	DIODE GP08D		IC202	8-759-708-12	IC NJM78L12A	
D399	8-719-977-22	DIODE DTZ9.1		IC203	8-759-339-60	IC TA8248K	
D401	8-719-421-40	DIODE MA77		IC300	8-759-365-26	IC TDA8375A	
D402	8-719-911-19	DIODE 1SS119-25		IC351	8-759-288-85	IC TDA4665T-T	
D403	8-719-911-19	DIODE 1SS119-25		IC354	8-759-251-56	IC TDA8395T	
D513	8-719-109-84	DIODE RD5.1ESB1		IC401	8-759-800-65	IC LA7910	
D551	8-719-908-03	DIODE GP08D		IC521	8-759-054-12	IC PQ09RA1	
D561	8-719-911-19	DIODE 1SS119-25		IC551	8-759-801-98	IC LA7830	
D591	8-719-911-19	DIODE 1SS119-25		IC601	8-749-014-00	IC STR-S6707N	
D601	8-719-052-84	DIODE LN4SB60		IC602	8-749-921-89	IC SE115N	
D601	8-719-510-53	DIODE D4SB60L		IC603 \triangle	8-749-010-64	PHOTO COUPLER PC123F2	
D604	8-719-301-64	DIODE RU4DS		IC801	8-759-100-96	IC UPC4558G2	
D605	8-719-067-18	DIODE RN4Z		IC1201	8-759-157-40	IC UPC574J	
D606	8-719-510-73	DIODE S3L20UF4		IC1210	8-759-100-96	IC UPC4558G2	
D607	8-719-510-26	DIODE D1NL20		IC1211	8-759-711-23	IC NJM2234L	
D609	8-719-510-26	DIODE D1NL20					
D610	8-719-510-26	DIODE D1NL20		IC1212	8-759-711-23	IC NJM2234L	
D611	8-719-510-26	DIODE D1NL20					
D801	8-719-945-80	DIODE ERC06-15S		<JACK>			
D802	8-719-900-26	DIODE ERD29-08J		J251	1-770-786-11	JACK	
D851	8-719-302-43	DIODE EL1Z		J1201	1-770-661-11	JACK BLOCK, PIN 6P	
D852	8-719-028-72	DIODE RGP02-17EL-6433		J1202	1-695-585-11	JACK BLOCK, PIN (L TYPE) 3P	
D853	8-719-302-43	DIODE EL1Z					
D855	8-719-302-43	DIODE EL1Z		<CHIP CONDUCTOR>			
D857	8-719-908-03	DIODE GP08D		JR050	1-216-295-91	SHORT 0	
D858	8-719-908-03	DIODE GP08D		JR052	1-216-295-91	SHORT 0	
D860	8-719-911-19	DIODE 1SS119-25		JR101	1-216-295-91	SHORT 0	
D901	8-719-054-60	DIODE LNK0220022G		JR103	1-216-295-91	SHORT 0 (KV-T21MN81 ONLY)	
D1201	8-719-121-24	DIODE RD9.1ESL		JR108	1-216-295-91	SHORT 0	
D1202	8-719-121-24	DIODE RD9.1ESL					
D1203	8-719-121-24	DIODE RD9.1ESL		JR113	1-216-295-91	SHORT 0	
D1207	8-719-121-24	DIODE RD9.1ESL		JR115	1-216-295-91	SHORT 0	
D1208	8-719-121-24	DIODE RD9.1ESL		JR116	1-216-295-91	SHORT 0	
D1209	8-719-121-24	DIODE RD9.1ESL		JR117	1-216-295-91	SHORT 0	
D1504	8-719-911-19	DIODE 1SS119-25		<COIL>			
D1505	8-719-109-81	DIODE RD4.7ESB2		L001	1-408-397-00	INDUCTOR 1UH	
<FUSE>				L002	1-410-509-11	INDUCTOR 10UH	
F601 \triangle	1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V (KV-T21MN81 ONLY)		L003	1-408-605-31	INDUCTOR 15UH	
				L101	1-410-470-11	INDUCTOR 10UH	
				L301	1-408-598-31	INDUCTOR 3.9UH	

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L401	1-410-498-11	INDUCTOR	1.2UH	Q1207	8-729-422-27	TRANSISTOR 2SD601A-Q	
L402	1-410-510-11	INDUCTOR	12UH	Q1208	8-729-422-27	TRANSISTOR 2SD601A-Q	
L403	1-410-510-11	INDUCTOR	12UH	Q1264	8-729-424-67	TRANSISTOR UN2216	
L404	1-410-508-11	INDUCTOR	8.2UH				
L405	1-410-508-11	INDUCTOR	8.2UH	Q1265	8-729-424-67	TRANSISTOR UN2216	
				Q1513	8-729-422-27	TRANSISTOR 2SD601A-Q	
L406	1-410-507-11	INDUCTOR	6.8UH				
L407	1-410-511-11	INDUCTOR	15UH				
L802	1-412-527-11	INDUCTOR	15UH			<RESISTOR>	
L804	1-459-075-00	COIL, CORE					
L805	1-459-769-13	COIL, HORIZONTAL LINEARITY		R001	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
				R002	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L807	1-459-390-00	INDUCTOR	0UH	R003	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L808	1-412-553-11	INDUCTOR	3.3MMH	R004	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
L821	1-459-111-00	INDUCTOR	0UH	R007	1-216-073-00	RES,CHIP	10K 5% 1/10W
L850	1-408-947-00	INDUCTOR	2.2MMH				
		<TRANSISTOR>		R008	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R009	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q030	8-729-422-27	TRANSISTOR 2SD601A-Q		R010	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q108	8-729-422-27	TRANSISTOR 2SD601A-Q		R012	1-216-017-91	RES,CHIP	47 5% 1/10W
Q109	8-729-422-27	TRANSISTOR 2SD601A-Q		R013	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q110	8-729-422-27	TRANSISTOR 2SD601A-Q		R014	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q202	8-729-216-22	TRANSISTOR 2SA1162-G		R015	1-216-043-91	RES,CHIP	560 5% 1/10W
				R016	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q207	8-729-216-22	TRANSISTOR 2SA1162-G		R017	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q208	8-729-421-19	TRANSISTOR UN2213		R018	1-216-033-00	RES,CHIP	220 5% 1/10W
Q209	8-729-424-67	TRANSISTOR UN2216					
Q210	8-729-424-67	TRANSISTOR UN2216		R019	1-216-101-00	RES,CHIP	150K 5% 1/10W
Q301	8-729-421-22	TRANSISTOR UN2211		R020	1-216-025-91	RES,CHIP	100 5% 1/10W
						(KV-T21MN81 ONLY)	
Q302	8-729-422-27	TRANSISTOR 2SD601A-Q		R021	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q303	8-729-422-27	TRANSISTOR 2SD601A-Q		R025	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q401	8-729-422-27	TRANSISTOR 2SD601A-Q		R026	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q402	8-729-922-66	TRANSISTOR 2SC2410SN					
Q403	8-729-424-67	TRANSISTOR UN2216		R027	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
				R028	1-216-025-91	RES,CHIP	100 5% 1/10W
Q404	8-729-424-67	TRANSISTOR UN2216		R029	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q405	8-729-216-22	TRANSISTOR 2SA1162-G		R031	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q406	8-729-216-22	TRANSISTOR 2SA1162-G		R032	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q407	8-729-216-22	TRANSISTOR 2SA1162-G					
Q408	8-729-422-27	TRANSISTOR 2SD601A-Q		R033	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R035	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q409	8-729-216-22	TRANSISTOR 2SA1162-G		R036	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q410	8-729-216-22	TRANSISTOR 2SA1162-G		R037	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q411	8-729-422-27	TRANSISTOR 2SD601A-Q		R038	1-216-033-00	RES,CHIP	220 5% 1/10W
Q412	8-729-422-27	TRANSISTOR 2SD601A-Q					
Q413	8-729-424-67	TRANSISTOR UN2216		R040	1-216-033-00	RES,CHIP	220 5% 1/10W
				R041	1-216-025-91	RES,CHIP	100 5% 1/10W
Q414	8-729-422-27	TRANSISTOR 2SD601A-Q		R042	1-216-039-00	RES,CHIP	390 5% 1/10W
Q415	8-729-424-67	TRANSISTOR UN2216		R045	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q416	8-729-422-27	TRANSISTOR 2SD601A-Q		R047	1-216-025-91	RES,CHIP	100 5% 1/10W
Q417	8-729-424-67	TRANSISTOR UN2216					
Q418	8-729-424-67	TRANSISTOR UN2216		R048	1-216-025-91	RES,CHIP	100 5% 1/10W
				R053	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q561	8-729-200-17	TRANSISTOR 2SA1091-O		R054	1-216-073-00	RES,CHIP	10K 5% 1/10W
Q801	8-729-140-50	TRANSISTOR 2SC3209LK		R057	1-216-049-91	RES,CHIP	1K 5% 1/10W
Q802	8-729-821-87	TRANSISTOR 2SD1878-CA		R058	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
Q821	8-729-209-15	TRANSISTOR 2SD2012					
Q902	8-729-421-19	TRANSISTOR UN2213		R060	1-216-037-00	RES,CHIP	330 5% 1/10W
				R061	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q903	8-729-421-19	TRANSISTOR UN2213		R062	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q1201	8-729-422-27	TRANSISTOR 2SD601A-Q		R063	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
Q1202	8-729-422-27	TRANSISTOR 2SD601A-Q		R065	1-216-033-00	RES,CHIP	220 5% 1/10W
Q1203	8-729-422-27	TRANSISTOR 2SD601A-Q					
Q1204	8-729-216-22	TRANSISTOR 2SA1162-G		R066	1-216-033-00	RES,CHIP	220 5% 1/10W
				R068	1-216-025-91	RES,CHIP	100 5% 1/10W
Q1205	8-729-216-22	TRANSISTOR 2SA1162-G		R071	1-216-037-00	RES,CHIP	330 5% 1/10W
Q1206	8-729-216-22	TRANSISTOR 2SA1162-G		R076	1-216-025-91	RES,CHIP	100 5% 1/10W
				R077	1-216-025-91	RES,CHIP	100 5% 1/10W



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R090	1-216-073-00	RES,CHIP	10K 5% 1/10W	R327	1-216-029-00	RES,CHIP	150 5% 1/10W
R101	1-216-065-91	RES,CHIP	4.7K 5% 1/10W			(KV-T21MN81)	
R102	1-216-049-91	RES,CHIP	1K 5% 1/10W	R328	1-216-295-91	SHORT	0 (KV-T21MN8)
R113	1-216-081-00	RES,CHIP	22K 5% 1/10W	R328	1-216-029-00	RES,CHIP	150 5% 1/10W
R114	1-216-041-00	RES,CHIP	470 5% 1/10W			(KV-T21MN81)	
				R329	1-216-295-91	SHORT	0 (KV-T21MN8)
R115	1-216-081-00	RES,CHIP	22K 5% 1/10W	R329	1-216-029-00	RES,CHIP	150 5% 1/10W
R116	1-216-081-00	RES,CHIP	22K 5% 1/10W			(KV-T21MN81)	
R117	1-216-081-00	RES,CHIP	22K 5% 1/10W				
R118	1-216-081-00	RES,CHIP	22K 5% 1/10W	R330	1-216-043-91	RES,CHIP	560 5% 1/10W
R119	1-216-055-00	RES,CHIP	1.8K 5% 1/10W	R331	1-216-117-00	RES,CHIP	680K 5% 1/10W
				R332	1-216-033-00	RES,CHIP	220 5% 1/10W
R120	1-216-109-00	RES,CHIP	330K 5% 1/10W	R334	1-216-041-00	RES,CHIP	470 5% 1/10W
R131	1-216-464-11	METAL OXIDE	18K 5% 2W F	R335	1-216-073-00	RES,CHIP	10K 5% 1/10W
R180	1-216-033-00	RES,CHIP	220 5% 1/10W				
R181	1-216-033-00	RES,CHIP	220 5% 1/10W	R336	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R182	1-216-033-00	RES,CHIP	220 5% 1/10W	R338	1-216-295-91	SHORT	0
				R339	1-216-036-00	RES,CHIP	300 5% 1/10W
R203	1-216-033-00	RES,CHIP	220 5% 1/10W			(KV-T21MN8 ONLY)	
R204	1-216-033-00	RES,CHIP	220 5% 1/10W	R340	1-216-035-00	RES,CHIP	270 5% 1/10W
R240	1-216-035-00	RES,CHIP	270 5% 1/10W			(KV-T21MN8 ONLY)	
R242	1-216-035-00	RES,CHIP	270 5% 1/10W	R341	1-216-049-91	RES,CHIP	1K 5% 1/10W
R243	1-216-073-00	RES,CHIP	10K 5% 1/10W				
				R342	1-216-036-00	RES,CHIP	300 5% 1/10W
R244	1-216-073-00	RES,CHIP	10K 5% 1/10W			(KV-T21MN81 ONLY)	
R245	1-216-067-00	RES,CHIP	5.6K 5% 1/10W	R343	1-216-035-00	RES,CHIP	270 5% 1/10W
R246	1-216-067-00	RES,CHIP	5.6K 5% 1/10W			(KV-T21MN81 ONLY)	
R247	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R344	1-216-129-00	RES,CHIP	2.2M 5% 1/10W
R248	1-216-053-00	RES,CHIP	1.5K 5% 1/10W	R351	1-216-001-00	RES,CHIP	10 5% 1/10W
				R355	1-216-001-00	RES,CHIP	10 5% 1/10W
R249	1-216-049-91	RES,CHIP	1K 5% 1/10W				
R250	1-216-049-91	RES,CHIP	1K 5% 1/10W	R356	1-216-049-91	RES,CHIP	1K 5% 1/10W
R251	1-216-295-91	SHORT	0	R357	1-216-097-91	RES,CHIP	100K 5% 1/10W
R252	1-249-411-11	CARBON	330 5% 1/4W			(KV-T21MN81 ONLY)	
R253	1-216-073-00	RES,CHIP	10K 5% 1/10W	R360	1-208-291-11	RES,CHIP	4.7M 5% 1/10W
				R401	1-216-085-00	RES,CHIP	33K 5% 1/10W
R254	1-249-389-11	CARBON	4.7 5% 1/4W	R402	1-216-081-00	RES,CHIP	22K 5% 1/10W
R255	1-249-389-11	CARBON	4.7 5% 1/4W				
R256	1-249-411-11	CARBON	330 5% 1/4W	R403	1-216-021-00	RES,CHIP	68 5% 1/10W
R264	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R404	1-216-035-00	RES,CHIP	270 5% 1/10W
R265	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R406	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
				R407	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
R266	1-216-089-91	RES,CHIP	47K 5% 1/10W	R408	1-216-055-00	RES,CHIP	1.8K 5% 1/10W
R302	1-216-295-91	SHORT	0				
R303	1-216-025-91	RES,CHIP	100 5% 1/10W	R409	1-216-025-91	RES,CHIP	100 5% 1/10W
R304	1-216-025-91	RES,CHIP	100 5% 1/10W	R410	1-216-073-00	RES,CHIP	10K 5% 1/10W
R305	1-216-025-91	RES,CHIP	100 5% 1/10W	R411	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
				R412	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
R306	1-216-025-91	RES,CHIP	100 5% 1/10W	R413	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R307	1-216-025-91	RES,CHIP	100 5% 1/10W				
R308	1-216-033-00	RES,CHIP	220 5% 1/10W	R414	1-216-041-00	RES,CHIP	470 5% 1/10W
R309	1-216-033-00	RES,CHIP	220 5% 1/10W	R415	1-216-033-00	RES,CHIP	220 5% 1/10W
R310	1-216-097-91	RES,CHIP	100K 5% 1/10W	R416	1-216-033-00	RES,CHIP	220 5% 1/10W
				R417	1-216-033-00	RES,CHIP	220 5% 1/10W
R311	1-216-075-00	RES,CHIP	12K 5% 1/10W	R418	1-216-045-00	RES,CHIP	680 5% 1/10W
R312	1-216-025-91	RES,CHIP	100 5% 1/10W				
R313	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R419	1-216-049-91	RES,CHIP	1K 5% 1/10W
R314	1-216-295-91	SHORT	0	R420	1-216-039-00	RES,CHIP	390 5% 1/10W
R315	1-216-295-91	SHORT	0	R421	1-216-033-00	RES,CHIP	220 5% 1/10W
				R422	1-216-027-00	RES,CHIP	120 5% 1/10W
R316	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R423	1-216-029-00	RES,CHIP	150 5% 1/10W
R317	1-216-049-91	RES,CHIP	1K 5% 1/10W				
R318	1-216-099-00	RES,CHIP	120K 5% 1/10W	R424	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R319	1-216-123-11	RES,CHIP	1.2M 5% 1/10W	R425	1-216-039-00	RES,CHIP	390 5% 1/10W
R320	1-216-083-00	RES,CHIP	27K 5% 1/10W	R426	1-216-029-00	RES,CHIP	150 5% 1/10W
				R427	1-216-037-00	RES,CHIP	330 5% 1/10W
R321	1-216-689-11	METAL CHIP	39K 0.50% 1/10W	R428	1-216-081-00	RES,CHIP	22K 5% 1/10W
R322	1-216-083-00	RES,CHIP	27K 5% 1/10W				
R325	1-216-295-91	SHORT	0	R429	1-216-031-00	RES,CHIP	180 5% 1/10W
R326	1-216-039-00	RES,CHIP	390 5% 1/10W	R430	1-216-041-00	RES,CHIP	470 5% 1/10W
R327	1-216-295-91	SHORT	0 (KV-T21MN8)	R431	1-216-081-00	RES,CHIP	22K 5% 1/10W

The components identified by shading
and mark Δ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R432	1-216-041-00	RES,CHIP	470 5% 1/10W	R809	1-247-756-11	CARBON	2.2K 5% 1/2W F
R433	1-216-081-00	RES,CHIP	22K 5% 1/10W	R811	1-216-343-00	METAL OXIDE	0.33 5% 1W F
R434	1-216-041-00	RES,CHIP	470 5% 1/10W	R812	1-216-075-00	RES,CHIP	12K 5% 1/10W
R435	1-216-041-00	RES,CHIP	470 5% 1/10W	R816	1-249-435-11	CARBON	33K 5% 1/4W
R436	1-216-081-00	RES,CHIP	22K 5% 1/10W	R820	1-216-655-11	METAL CHIP	1.5K 0.50% 1/10W
R437	1-216-081-00	RES,CHIP	22K 5% 1/10W	R821	1-215-911-11	METAL OXIDE	100 5% 3W F
R440	1-216-029-00	RES,CHIP	150 5% 1/10W	R822	1-216-429-00	METAL OXIDE	270 5% 1W F
R441	1-216-021-00	RES,CHIP	68 5% 1/10W	R823	1-249-931-11	CARBON	2.2K 5% 1/4W F
R521	1-216-049-91	RES,CHIP	1K 5% 1/10W	R825	1-249-392-11	CARBON	8.2 5% 1/4W F
R552	1-216-101-00	RES,CHIP	150K 5% 1/10W	R826	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R553	1-216-081-00	RES,CHIP	22K 5% 1/10W	R827	1-216-095-00	RES,CHIP	82K 5% 1/10W
R554	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	R828	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
R555	1-249-429-11	CARBON	10K 5% 1/4W	R829	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
R556	1-216-049-91	RES,CHIP	1K 5% 1/10W	R831	1-215-863-11	METAL OXIDE	100 5% 1W F
R557	1-216-055-00	RES,CHIP	1.8K 5% 1/10W	R832	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R560	1-216-059-00	RES,CHIP	2.7K 5% 1/10W	R834	1-216-073-00	RES,CHIP	10K 5% 1/10W
R561	1-249-421-11	CARBON	2.2K 5% 1/4W	R851	1-249-382-11	CARBON	1.2 5% 1/4W F
R562	1-249-419-11	CARBON	1.5K 5% 1/4W F	R852	1-249-417-11	CARBON	1K 5% 1/4W F
R563	1-260-126-11	CARBON	180K 5% 1/2W	R853	1-249-377-11	CARBON	0.47 5% 1/4W F
R564	1-216-091-00	RES,CHIP	56K 5% 1/10W	R854	1-249-377-11	CARBON	0.47 5% 1/4W F
R565	1-216-091-00	RES,CHIP	56K 5% 1/10W	R855	1-202-818-00	SOLID	1K 20% 1/2W
R566	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R856	1-249-429-11	CARBON	10K 5% 1/4W
R569	1-260-354-71	CARBON	150K 5% 1/2W	R857	1-249-438-11	CARBON	56K 5% 1/4W
R570	1-216-295-91	SHORT	0	R858	1-216-370-11	METAL OXIDE	1.2 5% 2W F
R571	1-216-033-00	RES,CHIP	220 5% 1/10W	R860	1-247-887-00	CARBON	220K 5% 1/4W
R601	1-202-961-11	CEMENTED (KV-T21MN8)	1.8 5% 10W	R881	1-216-043-91	RES,CHIP	560 5% 1/10W
R601	1-202-968-11	CEMENTED (KV-T21MN81)	1.2 5% 10W	R882	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R602	1-202-968-11	CEMENTED	1.2 5% 10W	R883	1-216-121-91	RES,CHIP	1M 5% 1/10W
R606	1-215-915-11	METAL OXIDE	470 5% 3W F	R895	1-216-349-00	METAL OXIDE	1 5% 1W F
R610	1-215-924-00	METAL OXIDE	15K 5% 3W F	R898	1-249-421-11	CARBON	2.2K 5% 1/4W
R611	1-202-933-61	FUSIBLE	0.1 10% 1/2W F	R902	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R612	1-219-134-11	FUSIBLE	0.1 10% 1/4W	R904	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R613	1-219-134-11	FUSIBLE	0.1 10% 1/4W	R905	1-216-049-91	RES,CHIP	1K 5% 1/10W
R614	1-215-877-11	METAL OXIDE	22K 5% 1W F	R906	1-216-049-91	RES,CHIP	1K 5% 1/10W
R615	1-249-389-11	CARBON	4.7 5% 1/4W	R907	1-216-055-00	RES,CHIP	1.8K 5% 1/10W
R616 Δ	1-218-265-91	METAL	8.2M 5% 1W	R908	1-216-055-00	RES,CHIP	1.8K 5% 1/10W
R617	1-215-924-00	METAL OXIDE	15K 5% 3W F	R909	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R618	1-219-134-11	FUSIBLE	0.1 10% 1/4W	R910	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R619	1-219-134-11	FUSIBLE	0.1 10% 1/4W	R911	1-216-071-00	RES,CHIP	8.2K 5% 1/10W
R622	1-217-192-21	WIREWOUND	0.22 10% 2W F	R913	1-216-041-00	RES,CHIP	470 5% 1/10W
R623	1-247-807-31	CARBON	100 5% 1/4W	R914	1-216-041-00	RES,CHIP	470 5% 1/10W
R624	1-216-446-00	METAL OXIDE	18 5% 2W F	R915	1-216-071-00	RES,CHIP	8.2K 5% 1/10W
R625	1-249-424-11	CARBON	3.9K 5% 1/4W	R1201	1-216-023-00	RES,CHIP	82 5% 1/10W
R626	1-249-420-11	CARBON	1.8K 5% 1/4W	R1202	1-216-049-91	RES,CHIP	1K 5% 1/10W
R627	1-249-417-11	CARBON	1K 5% 1/4W	R1203	1-216-089-91	RES,CHIP	47K 5% 1/10W
R628	1-249-417-11	CARBON	1K 5% 1/4W	R1204	1-216-089-91	RES,CHIP	47K 5% 1/10W
R629	1-249-399-11	CARBON	33 5% 1/4W	R1205	1-216-023-00	RES,CHIP	82 5% 1/10W
R632	1-249-381-11	CARBON	1 5% 1/4W	R1206	1-216-089-91	RES,CHIP	47K 5% 1/10W
R635	1-215-882-00	METAL OXIDE (KV-T21MN81 ONLY)	22 5% 2W F	R1207	1-216-089-91	RES,CHIP	47K 5% 1/10W
R636	1-215-924-00	METAL OXIDE	15K 5% 3W F	R1209	1-216-035-00	RES,CHIP	270 5% 1/10W
R801	1-215-920-11	METAL OXIDE	3.3K 5% 3W F	R1211	1-216-021-00	RES,CHIP	68 5% 1/10W
R802	1-249-385-11	CARBON	2.2 5% 1/4W F	R1212	1-216-049-91	RES,CHIP	1K 5% 1/10W
R803	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R1213	1-216-049-91	RES,CHIP	1K 5% 1/10W
R804	1-216-049-91	RES,CHIP	1K 5% 1/10W	R1214	1-216-113-00	RES,CHIP	470K 5% 1/10W
R805	1-216-081-00	RES,CHIP	22K 5% 1/10W	R1215	1-216-113-00	RES,CHIP	470K 5% 1/10W
				R1216	1-216-113-00	RES,CHIP	470K 5% 1/10W
				R1218	1-216-041-00	RES,CHIP	470 5% 1/10W



The components identified by shading and mark \triangle are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
R1219	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1220	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1221	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1222	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1223	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1224	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1226	1-216-689-11	RES,CHIP	39K 5% 1/10W
R1227	1-216-689-11	RES,CHIP	39K 5% 1/10W
R1227	1-216-689-11	RES,CHIP	39K 5% 1/10W
R1228	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1229	1-216-041-00	RES,CHIP	470 5% 1/10W
R1230	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1231	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1232	1-216-063-91	RES,CHIP	3.9K 5% 1/10W
R1233	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
R1234	1-216-689-11	RES,CHIP	39K 5% 1/10W
R1235	1-216-689-11	RES,CHIP	39K 5% 1/10W
R1239	1-249-389-11	CARBON	4.7 5% 1/4W F
R1240	1-216-025-91	RES,CHIP	100 5% 1/10W
R1241	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1242	1-216-049-91	RES,CHIP	1K 5% 1/10W
R1243	1-216-025-91	RES,CHIP	100 5% 1/10W
R1244	1-216-025-91	RES,CHIP	100 5% 1/10W
R1245	1-216-037-00	RES,CHIP	330 5% 1/10W
R1246	1-216-037-00	RES,CHIP	330 5% 1/10W
R1247	1-216-041-00	RES,CHIP	470 5% 1/10W
R1248	1-216-051-00	RES,CHIP	1.2K 5% 1/10W
R1249	1-216-041-00	RES,CHIP	470 5% 1/10W
R1513	1-216-073-00	RES,CHIP	10K 5% 1/10W
R1514	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R1515	1-216-025-91	RES,CHIP	100 5% 1/10W
<VARIABLE RESISTOR>			
RV301	1-241-769-11	RES, ADJ, CARBON 470K (KV-T21MN81 ONLY)	
<SWITCH>			
S601	\triangle 1-762-087-11	SWITCH, PUSH (A.C. POWER)	
S801	1-572-707-11	SWITCH, LEVER	
S901	1-570-577-41	SWITCH, PUSH	
S902	1-570-577-41	SWITCH, PUSH	
S903	1-570-577-41	SWITCH, PUSH	
S904	1-570-577-41	SWITCH, PUSH	
S905	1-570-577-41	SWITCH, PUSH	
<SPARK GAP>			
SG801	1-519-422-11	GAP, SPARK	
<SURFACE WAVE FILTER>			
SWF401	1-760-771-11	FILTER, SURFACE WAVE	
<TRANSFORMER>			
T601	\triangle 1-429-137-11	TRANSFORMER, CONVERTER (SRT)	
T605	\triangle 1-424-682-11	TRANSFORMER, LINE FILTER	

REF. NO.	PART NO.	DESCRIPTION	REMARK
T801	1-437-195-11	TRANSFORMER, HORIZONTAL DRIVE	
T851	\triangle 1-453-193-21	TRANSFORMER ASSY, FLYBACK (NX-1742//M3A)	
<THERMISTOR>			
THP601	\triangle 1-808-059-32	THERMISTOR, POSITIVE	
<TUNER>			
TU101	\triangle 8-598-323-30	TUNER, VSS BT-AG401 (KV-T21MN8)	
TU101	8-598-323-30	TUNER, VSS BT-AG401 (KV-T21MN81)	
<CRYSTAL>			
X101	1-577-358-21	VIBRATOR, CERAMIC	
X300	1-411-752-11	COIL	
X358	1-567-505-11	OSCILLATOR, CRYSTAL	
X443	1-567-504-11	OSCILLATOR, CRYSTAL	

* A-1297-751-A A3 BOARD, COMPLETE			

<CAPACITOR>			
C1201	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C1202	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C1205	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V
C1206	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V
C1207	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C1208	1-163-083-00	CERAMIC CHIP	1PF 0.25PF 50V
C1209	1-163-109-00	CERAMIC CHIP	47PF 5% 50V
C1210	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V
C1211	1-124-584-00	ELECT	100MF 20% 10V
C1212	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V
C1213	1-126-151-11	ELECT	4.7MF 20% 16V
C1214	1-163-017-00	CERAMIC CHIP	0.0047MF 10% 50V
C1215	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C1216	1-124-465-00	ELECT	0.47MF 20% 50V
C1217	1-163-033-91	CERAMIC CHIP	0.022MF 50V
C1218	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C1219	1-124-584-00	ELECT	100MF 20% 10V
C1221	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C1222	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C1223	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C1224	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C1225	1-163-093-00	CERAMIC CHIP	10PF 5% 50V
C1226	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V
C1227	1-163-131-00	CERAMIC CHIP	390PF 5% 50V
C1228	1-163-131-00	CERAMIC CHIP	390PF 5% 50V
C1229	1-126-157-11	ELECT	10MF 20% 16V
C1230	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
C1231	1-126-157-11	ELECT	10MF 20% 16V
C1232	1-124-234-00	ELECT	22MF 20% 16V
C1233	1-126-162-11	ELECT	3.3MF 20% 50V

A3

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1234	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V			<CHIP CONDUCTOR>	
C1235	1-163-005-11	CERAMIC CHIP	470PF 10% 50V				
C1236	1-163-005-11	CERAMIC CHIP	470PF 10% 50V	JR1	1-216-295-91	SHORT	0
C1237	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	JR2	1-216-295-91	SHORT	0
C1238	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	JR3	1-216-295-91	SHORT	0
				JR4	1-216-295-91	SHORT	0
C1239	1-126-157-11	ELECT	10MF 20% 16V	JR5	1-216-295-91	SHORT	0
C1240	1-164-222-11	CERAMIC CHIP	0.22MF 25V				
C1241	1-124-589-11	ELECT	47MF 20% 16V	JR6	1-216-295-91	SHORT	0
C1242	1-104-760-11	CERAMIC CHIP	0.047MF 10% 50V	JR7	1-216-295-91	SHORT	0
C1243	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	JR8	1-216-295-91	SHORT	0
				JR9	1-216-295-91	SHORT	0
C1244	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V	JR10	1-216-295-91	SHORT	0
C1245	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V				
C1246	1-163-231-11	CERAMIC CHIP	15PF 5% 50V	JR11	1-216-295-91	SHORT	0
C1247	1-163-229-11	CERAMIC CHIP	12PF 5% 50V				
C1248	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V			<COIL>	
C1250	1-163-009-11	CERAMIC CHIP	0.001MF 10% 50V	L1201	1-408-593-31	INDUCTOR	1.5UH
C1252	1-216-295-91	SHORT	0	L1202	1-412-010-41	INDUCTOR CHIP	22UH
C1253	1-216-295-91	SHORT	0	L1203	1-408-602-31	INDUCTOR	8.2UH
C1254	1-124-234-00	ELECT	22MF 20% 16V	L1204	1-408-591-11	INDUCTOR	1UH
C1255	1-124-584-00	ELECT	100MF 20% 10V	L1205	1-408-602-31	INDUCTOR	8.2UH
C1256	1-164-005-11	CERAMIC CHIP	0.47MF 25V	L1206	1-412-951-11	INDUCTOR	10UH
C1257	1-164-222-11	CERAMIC CHIP	0.22MF 25V	L1207	1-412-951-11	INDUCTOR	10UH
C1258	1-163-033-91	CERAMIC CHIP	0.022MF 50V				
C1260	1-163-251-11	CERAMIC CHIP	100PF 5% 50V			<TRANSISTOR>	
C1261	1-163-251-11	CERAMIC CHIP	100PF 5% 50V				
C1262	1-163-251-11	CERAMIC CHIP	100PF 5% 50V	Q1201	8-729-230-49	TRANSISTOR 2SC2712-YG	
C1263	1-163-137-00	CERAMIC CHIP	680PF 5% 50V	Q1203	8-729-266-92	TRANSISTOR 2SC2669-O	
C1264	1-163-251-11	CERAMIC CHIP	100PF 5% 50V	Q1206	8-729-216-22	TRANSISTOR 2SA1162-G	
C1265	1-124-234-00	ELECT	22MF 20% 16V	Q1207	8-729-230-49	TRANSISTOR 2SC2712-YG	
C1266	1-124-589-11	ELECT	47MF 20% 16V	Q1211	8-729-230-49	TRANSISTOR 2SC2712-YG	
C1267	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V	Q1212	8-729-230-49	TRANSISTOR 2SC2712-YG	
C1268	1-124-584-00	ELECT	100MF 20% 10V				
		<CONNECTOR>				<RESISTOR>	
CN1201	1-691-109-11	PLUG (L TYPE) 12P		R1201	1-216-022-00	RES,CHIP	75 5% 1/10W
				R1202	1-216-085-00	RES,CHIP	33K 5% 1/10W
				R1203	1-216-081-00	RES,CHIP	22K 5% 1/10W
		<DIODE>		R1204	1-216-035-00	RES,CHIP	270 5% 1/10W
				R1205	1-216-027-00	RES,CHIP	120 5% 1/10W
D1201	8-719-908-03	DIODE GP08D					
				R1207	1-216-053-00	RES,CHIP	1.5K 5% 1/10W
				R1210	1-216-041-00	RES,CHIP	470 5% 1/10W
		<FERRITE BEAD>		R1211	1-216-015-00	RES,CHIP	39 5% 1/10W
				R1212	1-216-097-91	RES,CHIP	100K 5% 1/10W
FB1201	1-412-911-11	FERRITE	0UH	R1213	1-216-097-91	RES,CHIP	100K 5% 1/10W
FB1202	1-412-911-11	FERRITE	0UH				
FB1203	1-412-911-11	FERRITE	0UH	R1214	1-216-033-00	RES,CHIP	220 5% 1/10W
FB1204	1-412-911-11	FERRITE	0UH	R1217	1-216-073-00	RES,CHIP	10K 5% 1/10W
FB1205	1-412-911-11	FERRITE	0UH	R1218	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R1219	1-216-047-91	RES,CHIP	820 5% 1/10W
FB1206	1-412-911-11	FERRITE	0UH	R1220	1-216-049-91	RES,CHIP	1K 5% 1/10W
		<FILTER>		R1223	1-216-051-00	RES,CHIP	1.2K 5% 1/10W
				R1224	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
FL1201	1-239-803-11	ENCAPSULATED COMPONENT		R1225	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
				R1226	1-216-295-91	SHORT	0
				R1227	1-216-295-91	SHORT	0
		<IC>		R1228	1-216-049-91	RES,CHIP	1K 5% 1/10W
IC1201	8-752-059-57	IC CXA1110BS		R1229	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
IC1202	8-759-429-98	IC MSP3410B-PP-F7		R1230	1-216-069-00	RES,CHIP	6.8K 5% 1/10W
IC1203	8-759-701-75	IC NJM7805FA		R1231	1-216-049-91	RES,CHIP	1K 5% 1/10W
				R1232	1-216-027-00	RES,CHIP	120 5% 1/10W

The components identified by shading
and mark \triangle are critical for safety.
Replace only with part number specified.

C

F₁ (KV-T21MN81)V₁ (KV-T21MN81)

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R738	1-247-807-31	CARBON 100 5%	1/4W	C04	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
R739	1-247-807-31	CARBON 100 5%	1/4W	C05	1-124-907-11	ELECT 10MF	20% 50V
R740	1-247-807-31	CARBON 100 5%	1/4W	C06	1-163-227-11	CERAMIC CHIP 10PF	0.5PF 50V
R755	1-249-418-11	CARBON 1.2K 5%	1/4W	C07	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
R756	1-249-418-11	CARBON 1.2K 5%	1/4W	C08	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
R757	1-249-418-11	CARBON 1.2K 5%	1/4W	C09	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
		<VARIABLE RESISTOR>		C10	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
RV701	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M		C11	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
*****				C12	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
	* A-1241-325-A	F1 BOARD, COMPLETE (KV-T21MN8 ONLY)		C13	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
		*****		C14	1-216-295-91	SHORT 0	
	1-533-223-11	CLIP, FUSE		C15	1-126-966-11	ELECT 33MF	20% 35V
		<CAPACITOR>		C16	1-126-963-11	ELECT 4.7MF	20% 50V
C1601	1-104-705-51	FILM 0.1MF 20%	250V	C17	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
		<CONNECTOR>		C19	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
CN1601*	1-580-843-11	PIN, CONNECTOR (POWER)		C20	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
CN1602*	1-580-843-11	PIN, CONNECTOR (POWER)		C22	1-126-964-51	ELECT 10MF	20% 50V
		<FUSE>		C23	1-163-038-91	CERAMIC CHIP 0.1MF	25V
F1601 \triangle	1-532-237-11	FUSE, TIME-LAG (BET) 3.15A/250V		C24	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
		<RESISTOR>		C25	1-126-964-51	ELECT 10MF	20% 50V
R1601 \triangle	1-202-916-91	SOLID 5.6M 20%	1/2W	C26	1-104-665-11	ELECT 100MF	20% 10V
		<TRANSFORMER>		C27	1-104-665-11	ELECT 100MF	20% 16V
T1601 \triangle	1-424-391-11	TRANSFORMER, LINE FILTER		C28	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
T1602 \triangle	1-424-391-11	TRANSFORMER, LINE FILTER		C29	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
*****				C30	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
	* A-1347-117-A	V1 BOARD, COMPLETE (KV-T21MN81 ONLY)		C31	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
		*****		C32	1-104-665-11	ELECT 100MF	20% 10V
	4-049-406-01	CASE (BOTTOM LID), SHIELD		<CONNECTOR>			
	4-049-407-01	CASE (UPPER LID), SHIELD		CN01	* 1-770-748-11	CONNECTOR, BOARD TO BOARD 12P	
		<CAPACITOR>		<DIODE>			
C01	1-163-037-11	CERAMIC CHIP 0.022MF 10%	50V	D03	8-719-914-43	DIODE DAN202K	
C02	1-124-907-11	ELECT 10MF 20%	50V	D04	8-719-105-91	DIODE RD5.6M-B2	
C03	1-163-037-11	CERAMIC CHIP 0.022MF 10%	50V	D05	8-719-914-44	DIODE DAP202K	
				D06	8-719-914-43	DIODE DAN202K	
				D001	8-719-105-52	DIODE RD3.6M-B2	
				<FERRITE BEAD>			
				FB01	1-410-397-21	FERRITE 1.1UH	
				<IC>			
				IC01	8-759-324-28	IC P83C654FBP/540	
				IC02	8-759-298-63	IC SAA5281ZP/E	
				<CHIP CONDUCTOR>			
				JR02	1-216-295-91	SHORT 0	
				JR03	1-216-295-91	SHORT 0	
				JR04	1-216-295-91	SHORT 0	
				JR07	1-216-295-91	SHORT 0	
				JR08	1-216-295-91	SHORT 0	
				JR09	1-216-295-91	SHORT 0	

V₁ (KV-T21MN81) **VM**

REF. NO.	PART NO.	DESCRIPTION		REMARK		REF. NO.	PART NO.	DESCRIPTION		REMARK	
		<COIL>				R43	1-216-295-91	SHORT	0		
L01	1-410-464-11	INDUCTOR	3.3UH			R44	1-216-083-00	RES,CHIP	27K	5%	1/10W
L03	1-410-464-11	INDUCTOR	3.3UH			R45	1-216-021-00	RES,CHIP	68	5%	1/10W
L04	1-410-464-11	INDUCTOR	3.3UH			R46	1-216-021-00	RES,CHIP	68	5%	1/10W
L05	1-410-464-11	INDUCTOR	3.3UH			R47	1-216-021-00	RES,CHIP	68	5%	1/10W
L06	1-410-464-11	INDUCTOR	3.3UH			R48	1-216-049-91	RES,CHIP	1K	5%	1/10W
		<TRANSISTOR>				R49	1-216-049-91	RES,CHIP	1K	5%	1/10W
Q01	8-729-120-28	TRANSISTOR 2SC1623-L5L6				R50	1-216-049-91	RES,CHIP	1K	5%	1/10W
Q02	8-729-027-43	TRANSISTOR DTC114EKA-T146						<CRYSTAL>			
Q03	8-729-120-28	TRANSISTOR 2SC1623-L5L6				X01	1-579-266-31	CRYSTAL VIBRATOR			
Q04	8-729-120-28	TRANSISTOR 2SC1623-L5L6						*****			
Q05	8-729-216-22	TRANSISTOR 2SA1162-G						* A-1342-395-A		VM BOARD, COMPLETE	
Q06	8-729-120-28	TRANSISTOR 2SC1623-L5L6						*****			
Q07	8-729-019-01	TRANSISTOR 2SD2394-EF									
Q08	8-729-140-96	TRANSISTOR 2SD774-34									
Q09	8-729-901-04	TRANSISTOR DTA114EK									
		<RESISTOR>									
R01	1-216-061-00	RES,CHIP	3.3K	5%	1/10W		4-382-854-11	SCREW (M3X10), P, SW (+)			
R02	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
R03	1-216-085-00	RES,CHIP	33K	5%	1/10W						
R04	1-216-025-91	RES,CHIP	100	5%	1/10W			<CAPACITOR>			
R05	1-216-057-00	RES,CHIP	2.2K	5%	1/10W						
R06	1-216-075-00	RES,CHIP	12K	5%	1/10W	C1722	1-102-115-00	CERAMIC	560PF	10%	50V
R07	1-216-025-91	RES,CHIP	100	5%	1/10W	C1724	1-102-961-00	CERAMIC	27PF	5%	50V
R08	1-216-025-91	RES,CHIP	100	5%	1/10W	C1751	1-136-153-00	FILM	0.01MF	5%	50V
R09	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	C1761	1-161-830-00	CERAMIC	0.0047MF		500V
R10	1-216-083-00	RES,CHIP	27K	5%	1/10W	C1763	1-107-638-11	ELECT	33MF	20%	160V
R11	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	C1764	1-126-933-11	ELECT	100MF	20%	16V
R12	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	C1768	1-106-383-00	MYLAR	0.047MF	10%	200V
R13	1-216-061-00	RES,CHIP	3.3K	5%	1/10W	C1769	1-107-667-11	ELECT	2.2MF	20%	160V
R14	1-164-004-11	CERAMIC CHIP	0.1MF	10%	25V	C1770	1-104-999-11	MYLAR	0.1MF	10%	200V
R16	1-216-073-00	RES,CHIP	10K	5%	1/10W	C1771	1-126-964-11	ELECT	10MF	20%	50V
R17	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	C1772	1-126-933-11	ELECT	100MF	20%	16V
R18	1-216-059-00	RES,CHIP	2.7K	5%	1/10W	C1773	1-106-383-00	MYLAR	0.047MF	10%	200V
R19	1-216-049-91	RES,CHIP	1K	5%	1/10W	C1775	1-126-933-11	ELECT	100MF	20%	16V
R20	1-216-049-91	RES,CHIP	1K	5%	1/10W	C1776	1-126-964-11	ELECT	10MF	20%	50V
R21	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	C1778	1-130-471-00	MYLAR	0.001MF	5%	50V
R22	1-216-041-00	RES,CHIP	470	5%	1/10W	C1779	1-130-471-00	MYLAR	0.001MF	5%	50V
R24	1-216-025-91	RES,CHIP	100	5%	1/10W	C1780	1-126-964-11	ELECT	10MF	20%	50V
R25	1-216-025-91	RES,CHIP	100	5%	1/10W			<			

